TP 13880E

PROTECTED A

AEI/OCR SYSTEM INTEGRATION

[redacted]

Submitted to

Transportation Development Centre
Transport Canada

NON-RELEASABLE
NON-ACCESSIBLE
Date: 10-05-2002

ACCESSIBLE
Date: 12-03-2004

November 2001

DTI

105-03022/

TP 13880E

AEI/OCR SYSTEM INTEGRATION

Submitted to

Transportation Development Centre
Transport Canada

Prepared by:
Robert Charbonneau

Approved by:
Daniel Desmarais

November 2001

DTI

This report reflects the views of DTI Telecom inc. and not necessarily those of the Transportation Development Centre or the Port of Montreal.

The Transportation Development Centre does not endorse products or manufacturers. Trade or manufacturers' names appear in this report only because they are essential to its objectives.

Since the accepted measures in the industry are imperial, metric measures are not used in this report.

Un sommaire français se trouve avant la table des matières.

Transport Canada Transports Canada

PUBLICATION DATA FORM

1. Transport Canada Publication No.
TP 13880E

2. Project No.
5090

3. Recipient's Catalogue No.

4. Title and Subtitle
AEI/OCR System Integration

5. Publication Date
November 2001

6. Performing Organization Document No.

7. Author(s)
Robert Charbonneau

8. Transport Canada File No.
ZCD2450-360-5

9. Performing Organization Name and Address
DTI Telecom
625 René Lévesque Blvd. W
Montreal, Quebec
H3B 1R2

10. PWGSC File No.
MTB-1-00172

11. PWGSC or Transport Canada Contract No.
T8200-1-1500/001/MTB

12. Sponsoring Agency Name and Address
Transportation Development Centre (TDC)
800 René Lévesque Blvd. West
Suite 600
Montreal, Quebec
H3B 1X9

13. Type of Publication and Period Covered
Final

14. Project Officer
Ernst Radloff

15. Supplementary Notes (Funding programs, titles of related publications, etc.)
Co-sponsored by the Port of Montreal

16. Abstract

This R&D project was undertaken to help the Port of Montreal improve the efficiency and productivity of container movement through the Port. The prototype AEI/OCR system was tested at the Port to verify the design parameters of the system. The required performance was specified in terms of accuracy and processing time criteria. The tests demonstrated that the system was able to achieve the required network data transfer rate at all times, but could meet the target accuracy only under optimal conditions. The tests demonstrated the impact of malfunctioning ancillary equipment on the accuracy of the OCR component of the system. The researchers identified ways of improving the performance and reliability of the AEI/OCR system, so that it could achieve the required performance in an operational environment.

17. Key Words
Electronic data interchange, automated equipment identification, optical character recognition

18. Distribution Statement
Limited number of copies available from the Transportation Development Centre

19. Security Classification (of this publication)
Protected

20. Security Classification (of this page)
Unclassified

21. Declassification (date)
—

22. No. of Pages
xvi, 68, apps

23. Price
Shipping/ Handling

Canada

Transports Canada Transport Canada

FORMULE DE DONNÉES POUR PUBLICATION

1. Nº de la publication de Transports Canada
TP 13880E

2. Nº de l'étude
5090

3. Nº de catalogue du destinataire

4. Titre et sous-titre
AEI/OCR System Integration

5. Date de la publication
Novembre 2001

6. Nº de document de l'organisme exécutant

7. Auteur(s)
Robert Charbonneau

8. Nº de dossier - Transports Canada
ZCD2450-360-5

9. Nom et adresse de l'organisme exécutant
DTI Telecom
625, boul. René-Lévesque Ouest
Montréal, Québec
H3B 1R2

10. Nº de dossier - TPSGC
MTB-1-00172

11. Nº de contrat - TPSGC ou Transports Canada
T8200-1-1500/001/MTB

12. Nom et adresse de l'organisme parrain
Centre de développement des transports (CDT)
800, boul. René-Lévesque Ouest
Bureau 600
Montréal (Québec)
H3B 1X9

13. Genre de publication et période visée
Final

14. Agent de projet
Ernst Radloff

15. Remarques additionnelles (programmes de financement, titres de publications connexes, etc.)
Coparrainé par le Port de Montréal

16. Résumé

Ce projet de R&D visait à appuyer l'objectif du Port de Montréal de rendre plus efficaces et plus productifs les mouvements de conteneurs dans le port. Un prototype du système IAE/ROC a été mis à l'essai afin de valider les critères de conception du système. Les critères de performance, aux fins des essais, avaient trait à la précision et à la vitesse de transfert des données. Les essais ont montré que le système pouvait respecter en tout temps la vitesse de transfert des données en réseau spécifiée, mais qu'il ne pouvait atteindre le degré de précision cible que dans des conditions optimales. Ils ont en outre fait ressortir les effets du mauvais fonctionnement du matériel auxiliaire sur la précision du moteur ROC. Enfin, les chercheurs ont trouvé des façons d'améliorer la performance et la fiabilité du système IAE/ROC de façon qu'il puisse répondre aux critères de performance en service réel.

17. Mots clés
Échange de données informatisées,
identification automatique d'équipements,
reconnaissance optique de caractères

18. Diffusion
Le Centre de développement des transports dispose d'un nombre limité d'exemplaires.

19. Classification de sécurité (de cette publication)
Protégée

20. Classification de sécurité (de cette page)
Non classifiée

21. Déclassification (date)
—

22. Nombre de pages
xvi, 68, ann.

23. Prix
Port et manutention

Canada

ACKNOWLEDGEMENTS

The authors wish to thank Mr. Richard Desaulniers of the Port of Montreal, Mr. Pierre Pageau, Yves Plasse and Lorne O'Connor of CCTC, as well as Mr. Ernst Radloff of the Transportation Development Centre, Transport Canada, for their cooperation throughout this project.

EXECUTIVE SUMMARY

This R&D project was undertaken by Transport Canada's Transportation Development Centre (TDC) to help the Port of Montreal to improve the efficiency and productivity of container movement through the Port. It complements a larger program seeking to achieve fully integrated electronic data interchange (EDI) between Port stakeholders.

The Automated Equipment Identification/Optical Character Recognition (AEI/OCR) system installed in the Port of Montreal was designed and developed jointly by the Institut national d'optique (INO) and its sub-contractor CCTC. This system integrates AEI with a state-of-the-art OCR system developed by INO for automatic identification of railcars and containers. The integration of these two technologies into an information technology environment meets the Port of Montreal's requirement for timely and accurate information, and provides a basis for improving the level of service to customers.

The performance of the AEI/OCR system was specified in terms of accuracy and processing time criteria. The minimum required accuracy was established at 80 percent. The time to process the results, including the generation of an EDI file, was within 20 minutes of the passage of a "reference train", which was defined as a fully loaded, double-stack 6000' train, equivalent to 120 platforms each bearing the maximum of three containers. The system was also designed to ensure proper operation for train speeds varying between 10 and 20 mph, although the actual system can also handle slower speeds, train stops, and direction reversals.

The prototype of the AEI/OCR system was first tested in November 2000. Following this test period, certain problems related to integration of the different modules were identified. DTI Télécom Inc. (DTI) was engaged by TDC to carry out the following tasks:

- improve the processing time of the AEI/OCR system by correcting the deficiencies in the network transfer rate and by demonstrating the improved performance in acceptance tests;
- assume the role of systems integrator during this period and coordinate all activities leading to acceptance of the system;
- supervise, coordinate, verify, and obtain approval of the test plans, procedures, and results analyses and implement solutions to ensure the project's success.

DTI carried out a series of laboratory performance tests on the equipment (computers, switches, and network cables) installed on the site and proposed a series of changes based on the results obtained. These were approved by TDC. The modified network configuration was installed on the site and the acceptance testing was conducted from noon, August 22, 2001, to 11:15 a.m., September 5, 2001, under good weather conditions.

During this period, 113 train moves were observed. After eliminating the empty moves and simulations, the analysis showed that 89 moves out of the 92 selected (i.e., over 96%) met the target objective of 20 minutes of processing time. An end-of-train detection problem with three moves resulted in their being discarded from the selection and prevented achievement of a 100% success rate.

The changes made to the operating system of the OCR program (both hardware and software) allowed the network data transfer rate to be increased to attain the processing time specified in the design. Certain software recommendations proposed by DTI would allow further improvement of the network processing time.

The accuracy achieved by the OCR sub-system in identifying the container numbers is undoubtedly the most important criterion for the effectiveness of the AEI/OCR system. However, during the course of the trial period numerous problems arose with the ancillary systems and components, which prevented the system from functioning properly. This resulted in system downtime, power outages, and invalid images that were difficult to process by the OCR program. Thus none of the train moves could be considered trouble free, and the OCR accuracy reflected these problems. To achieve a true measure of the OCR accuracy requires the system to be set up and functioning properly. Since these conditions were not present during the tests, it would be a mistake to make a critical judgment on the true OCR accuracy obtained from the data and statistics contained in this report.

In spite of these drawbacks, the results when the system was functioning relatively well were very encouraging. On August 31, 85% OCR accuracy was obtained, despite problems with the image capture software. Several analysis tables were produced to confirm or rule out some assumptions regarding the level of accuracy achieved with the AEI/OCR system.

After the two weeks of testing, it was concluded that, with optimal equipment set-up conditions and efficient operating conditions for the AEI system, the target objective of 80% OCR accuracy could be met. Consequently, it is essential to continue to work on implementing solutions to solve the problems found during the acceptance testing.

After analyzing the test results, DTI examined the computers and operating systems comprising the AEI/OCR system. A series of recommendations were tabled encompassing three different aspects of the system: physical (or equipment) infrastructure, computer equipment, and software.

It was evident that the system infrastructure had degraded significantly. To improve the overall performance and make the AEI/OCR system into an operational tool, a complete revision of the physical infrastructure is required. Although the system's network components have been examined and updated, DTI feels that other hardware components of the system should be reviewed before proceeding with implementation of an operational system. Finally, some corrections and/or revisions will also have to be made to the AEI program to make it more stable and to improve its performance in this unique application.

DTI was able to improve the overall network processing time of the AEI/OCR system by correcting deficiencies observed in the data transfer rates on the local area network. However, during the acceptance tests and the subsequent analysis of the test results, it was evident that the system installation had degraded and the system performance was far from optimal.

The current single-track AEI/OCR system is still considered a prototype. With the infrastructure, equipment, software and hardware improvements identified, it could become operational. Correcting the identified deficiencies would require additional resources. Future migration of the system to a double-track location at another site in the Port of Montreal would require rearrangement of the tracks.

During the tests integration of the various sub-systems to achieve acceptable overall performance posed the greatest challenge. The acceptance test phase led to the identification of solutions for improving system performance and enhancing the reliability of the AEI/OCR network system. These solutions could allow the system to achieve the required performace in an operational environment.

SOMMAIRE

Ce projet de R&D a été entrepris par le Centre de développement des transports (CDT) de Transports Canada pour appuyer l'objectif du Port de Montréal de rendre plus efficaces et plus rentables les mouvements de conteneurs dans le port. Il s'inscrit dans le cadre d'un programme de plus grande envergure qui vise l'intégration complète de l'échange de données informatisées (EDI) entre les intervenants en liaison avec le Port.

Le système d'identification automatique d'équipements/de reconnaissance optique des caractères (IAE/ROC) installé dans le port de Montréal a été conçu et mis au point par l'Institut national d'optique (INO) de concert avec son sous-contractant, le CCTC. Ce système intègre l'IAE à un moteur ROC de pointe mis au point par l'INO pour l'identification automatique des wagons et des conteneurs. L'intégration de ces deux technologies dans un environnement de technologie de l'information répond au besoin du Port de Montréal de disposer rapidement d'une information précise, et constitue le premier pas vers une amélioration du niveau de service aux clients.

Les critères retenus pour évaluer la performance du système IAE/ROC avaient trait à la précision et au temps de traitement des données. La précision minimale exigée était de 80 p. 100. Pour ce qui est du temps de traitement des données, y compris de production de fichiers EDI, l'objectif visé était de 20 minutes après le passage d'un «train de référence», défini comme un train à deux niveaux de 6 000 pi chargé à capacité, soit l'équivalent de 120 plate-formes portant chacune un maximum de trois conteneurs. Le système a été conçu pour fonctionner correctement au passage de trains roulant à des vitesses de 10 à 20 mi/h, mais il peut aussi traiter des trains qui roulent plus lentement, des trains à l'arrêt et des trains qui roulent en sens contraire.

Le prototype du système IAE/ROC a été mis à l'essai une première fois en novembre 2000. Ces premiers essais ont révélé certains problèmes reliés à l'intégration des différents modules. Le CDT a alors confié à DTI Télécom Inc. (DTI) les tâches suivantes :

- améliorer le temps de traitement du système, c'est-à-dire corriger les lacunes qui limitent les vitesses de transfert au sein du réseau et faire la démonstration, lors d'essais de réception, que le système a atteint le niveau de performance spécifié;
- pendant ces travaux, assumer les fonctions d'intégrateur de systèmes et coordonner toutes les activités devant mener à l'acceptation du système;
- assurer la supervision, la coordination, la vérification et l'approbation des plans et méthodes d'essai, faire l'analyse des résultats et mettre en œuvre les solutions élaborées pour garantir la réussite du projet.

DTI a soumis le matériel (ordinateurs, commutateurs et câbles de réseau) installé sur le site à une série d'essais de performance en laboratoire et, après examen des résultats, a proposé des modifications qui ont reçu l'approbation du CDT. La configuration de réseau ainsi modifiée a été installée sur le site et soumise à des essais de réception qui se sont déroulés de 12 h, le 22 août 2001 à 11 h 15, le 5 septembre 2001, dans des conditions météorologiques favorables.

Au cours de cette période, 113 mouvements de trains ont été observés. Après qu'eurent été soustraits les trains vides et les cas de simulation, il restait 92 mouvements pour analyse. De ce nombre, 89 (plus de 96 p. 100) concernaient des trains qui avaient été traités en moins de 20 minutes, soit en deçà du temps de traitement cible. N'eurent été des problèmes de capteurs de fin de train qui ont obligé les chercheurs à écarter trois mouvements, le taux de réussite aurait été de 100 p. 100.

Les modifications apportées au système d'exploitation du programme ROC (matériel et logiciel) ont permis d'augmenter la vitesse de transfert des données en réseau jusqu'à la vitesse établie comme critère. Certaines recommandations formulées par DTI concernant le logiciel, si elles étaient appliquées, permettraient d'accélérer encore le traitement.

La précision avec laquelle le moteur ROC est capable de reconnaître les numéros d'identification des conteneurs est sans contredit le plus important critère d'efficacité du système IAE/ROC. Mais au cours de la période d'essai, les systèmes et composants auxiliaires ont présenté nombre de défaillances, qui ont empêché le système de fonctionner correctement. Ces défaillances ont entraîné une indisponibilité du système, des pannes d'alimentation et des images invalides, difficiles à traiter par le programme ROC. C'est ainsi qu'aucun des mouvements de trains n'a pu être considéré comme «sans incident», et la précision de la reconnaissance optique des caractères a été à l'avenant. Or, pour mesurer véritablement la précision d'un système ROC, celui-ci doit être correctement installé et exploité. Comme ces conditions n'étaient pas remplies pendant les essais, ce serait une erreur de porter un jugement critique sur la véritable précision du système ROC à partir des données et des statistiques contenues dans le présent rapport.

Quelles que soient les lacunes observées, il reste que les résultats obtenus alors que le système fonctionnait relativement bien sont très encourageants. Ainsi, le 31 août, une précision de reconnaissance de 85 p. 100 a été obtenue, en dépit des défaillances du logiciel de saisie d'images. Plusieurs tableaux d'analyse ont été produits pour confirmer ou éliminer certaines hypothèses touchant le degré de précision obtenu à l'aide du système IAE/ROC.

CONTENTS

Page

1 INTRODUCTION 1

2 SYSTEM ACCEPTANCE CRITERIA 3

3 OPERATING RULE – ACCEPTANCE TESTS 4

- 3.1 Acceptance Test Period 4
- 3.2 System Configuration 5
  - 3.2.1 Revised architecture of the AEI/OCR system 5
  - 3.2.2 Reviewed LAN topology 6
  - 3.2.3 Description of the changes introduced to the system 6
- 3.3 Control Process During the Test Period at the Port of Montreal Site 7

4 OBSERVATIONS 8

- 4.1 Weather Conditions 8
- 4.2 Trains Observed 10
- 4.3 Chronology of Events 14

5 ANALYSIS 16

- 5.1 Processing Time 16
- 5.2 Accuracy 20
- 5.3 Other Observations 25

6 RECOMMENDATIONS 37

- 6.1 Equipment and Infrastructure 37
  - 6.1.1 Cameras 37
  - 6.1.2 Lighting systems 45
  - 6.1.3 Electrical installations 51
  - 6.1.4 Motion/speed detection system 53
  - 6.1.5 Bungalow 60
  - 6.1.6 Computer equipment 61
  - 6.1.7 Communication equipment 64
- 6.2 Software 65
  - 6.2.1 Synchronization between the AEI station and the LICO stations 65
  - 6.2.2 Processing of "null" trains 65
  - 6.2.3 Upgrading of the AEI and LICO operating system 65
  - 6.2.4 Modification to the LICO software to ensure end-of-train detection 66
  - 6.2.5 OCR source code documentation and update 66
  - 6.2.6 EDI file transfer via a direct link to the Port of Montreal 66

7 CONCLUSION 67

APPENDIX A Keyboard/Mouse/Monitor Sharing Switch

APPENDIX B Detailed Tables of OCR Results (moves with containers)

LIST OF FIGURES

Figure 1 Picture of the site near elevator No. 5 4
Figure 2 Plan of the revised architecture 5
Figure 3 Plan of the new topology 6
Figure 4 Location of the eastbound move sensor 11
Figure 5 OCR reference lights – side view of camera 1 26
Figure 6 OCR reference lights – side view of camera 2 27
Figure 7 Camera 1 38
Figure 8 Camera 2 39
Figure 9 Fastening mechanism 40
Figure 10 Camera housing – bottom part 41
Figure 11 Pole – view #1 42
Figure 12 Pole – view #2 43
Figure 13 Pole – view #3 44
Figure 14 Light systems – view from camera 1 side 46
Figure 15 Light systems – view from camera 2 side 47
Figure 16 Spotlights (in position) 48
Figure 17 Spotlights (displaced) 49
Figure 18 Westbound wheel sensor 54
Figure 19 Close-up of the wheel sensor with protective bar 55
Figure 20 Speed sensor with damaged housing 56
Figure 21 Eastbound wheel sensor 57
Figure 22 Eastbound wheel sensor located near Mosaïcultures coordinating centre 58
Figure 23 Location where the eastbound wheel sensor should have been installed 59
Figure 24 Bungalow – front view 60
Figure 25 Switch boxes – distribution plan 62
Figure 26 Automatic switch boxes – proposed distribution 63

LIST OF TABLES

Table 1 Transfer rate performance....3
Table 2 OCR accuracy performance....3
Table 3 Weather conditions (on a daily basis)....8
Table 4 Weather conditions (by time slot)....9
Table 5 Classification of the observed moves....10
Table 6 Move information....12
Table 7 Events during the acceptance tests period....14
Table 8 Overexposure problem – list of affected moves....15
Table 9 Breakdown by average length....16
Table 10 Processing times....17
Table 11 Processing times - exceptions....19
Table 12 Accuracy rate – optimal conditions....22
Table 13 Moves with containers....23
Table 14 Accuracy rate on reserved moves....24
Table 15 Daytime accuracy rate....28
Table 16 Nighttime accuracy rate....29
Table 17 Accuracy rate after adjustment of camera 1....30
Table 18 Accuracy rate – speed moves between 10 and 20 mph....31
Table 19 Accuracy rate – 80% and higher....32
Table 20 Accuracy rate for all container companies....34
Table 21 Accuracy rate for companies with most containers....36
Table 22 Statistics per camera side....37
Table 23 Breakers (current situation)....52
Table 24 Breakers (proposed distribution)....52
Table 25 SSR distribution – example camera 1....53
Table 26 Computer configuration – operating system (OS)....61
Table 27 Current configuration of the switch boxes....62
Table 28 Proposed switch configuration....63

1 INTRODUCTION

This R&D project was undertaken by Transport Canada's Transportation Development Centre (TDC) to help the Port of Montreal improve the efficiency and productivity of container movement through the Port. It complements a larger program seeking to achieve fully integrated electronic data interchange (EDI) between Port stakeholders.

The Automated Equipment Identification/Optical Character Recognition (AEI/OCR) system installed in the Port of Montreal was designed and developed jointly by the Institut National d'optique (INO) and their sub-contractor CCTC. This system integrates AEI with a state-of-the-art OCR system developed by INO for automatic identification of railcars and containers.

The development of an integrated AEI/OCR system would enable existing AEI readers to be integrated with the Port of Montreal's Information Technologies (IT) environment. The objective was to fully automate the process of building a container train consist in an EDI format and providing information that can integrate it into the IT and Port Community systems. This would provide value-added service and meet the stakeholder requirement for timely and accurate information.

The AEI/OCR prototype system installed at the Port of Montreal is intended to produce train consists (EDI files) giving the composition of the train, including the position of each container on every railcar. Train images are gathered as the train passes through the system and processed for container ID recognition The recognition task is performed by an OCR engine parsing every image of the train to segment and interpret the ISO6346 codes painted on both sides of the containers.

The performance of the OCR engine was judged by accuracy and processing time criteria. An accuracy of greater than 80% was achieved during the acceptance test period. The required time to process the results, including the generation of an EDI file, was within 20 minutes of the passage of a "reference train". The reference train was defined as a fully loaded double-stack 6000' train, equivalent to 120 platforms each bearing the maximum of three containers.

The prototype AEI/OCR system as delivered by INO was first tested in November 2000. It successfully demonstrated the specified accuracy for container identification during the acceptance test of the system installed at the Port. However, the specified 20-minute processing time was not met. Following this test period, certain problems related to integration of the different network modules were identified. Among them, the nature and performance of the existing network and the diversity of operating systems used by the sub-systems were presented in the INO test report as being major sources of reliability and network performance problems.

In May 2001, Transport Canada's Transportation Development Centre (TDC) engaged the services of DTI as a system integrator to work with CCTC on-site during the installation, set-up, and test activities, to achieve a successful resolution of the network transfer problems.

DTI was responsible for all activities leading to the acceptance of the system. The work encompassed the resolution of the system problems, the identification of the elements leading to a solution, and the implementation of corrective measures, including setting up the system prior to testing. DTI was also responsible for the supervision, coordination, verification, and approval of the test plans and procedures, analyses of results, and implementation of solutions.

2 SYSTEM ACCEPTANCE CRITERIA

The acceptance of the AEI/OCR system by the Port of Montreal is based on a reference train with the following features:

6000' train loaded at full capacity (i.e., 120 platforms carrying three containers each)
Train travelling at a rated speed of 15 miles per hour with a variation of 5 miles per hour

The network data transfer rate and container identification accuracy specified for the system was conditional on meeting well-defined criteria. The analysis of the test results conforms to specific validity criteria outlined in Table 1.

Table 1 Transfer rate performance

Objective	Processing time within 20 minutes (from detection of the train to creation of the EDI file containing the data)
Validity criteria	Reference train must pass by the site within 6 minutes 49 seconds at a minimal rated speed of 10 mph Overall processing time must be achieved within 20 minutes Train speed must be between 10 and 20 mph

Table 2 OCR accuracy performance

Objective	OCR accuracy over 80%
Validity criteria	Container ID code should be compatible with ISO 6346 identification standard Complete ID code must be visible (nothing missing, hidden, erased, or altered) The four OCR reference lights must be aligned to detect the presence of containers The calibration lights must be functioning for adjustment of camera gain and ambient luminosity; otherwise, over or under exposure of the images may occur

3 OPERATING RULE – ACCEPTANCE TESTS

3.1 Acceptance Test Period

The acceptance tests were held from noon on August 22, 2001, to 11:15 AM on September 5, 2001, at the site located near elevator No. 5 in the Port of Montreal.

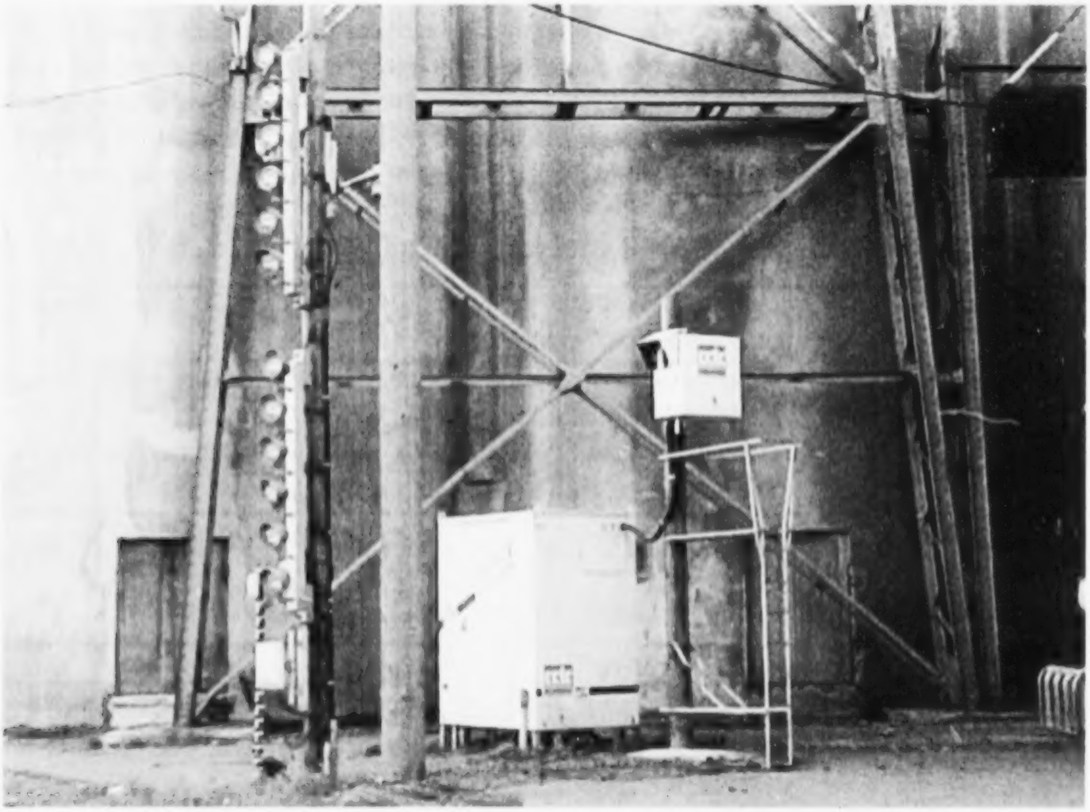


Figure 1 Picture of the site near elevator No. 5

3.2 System Configuration

3.2.1 Revised architecture of the AEI/OCR system

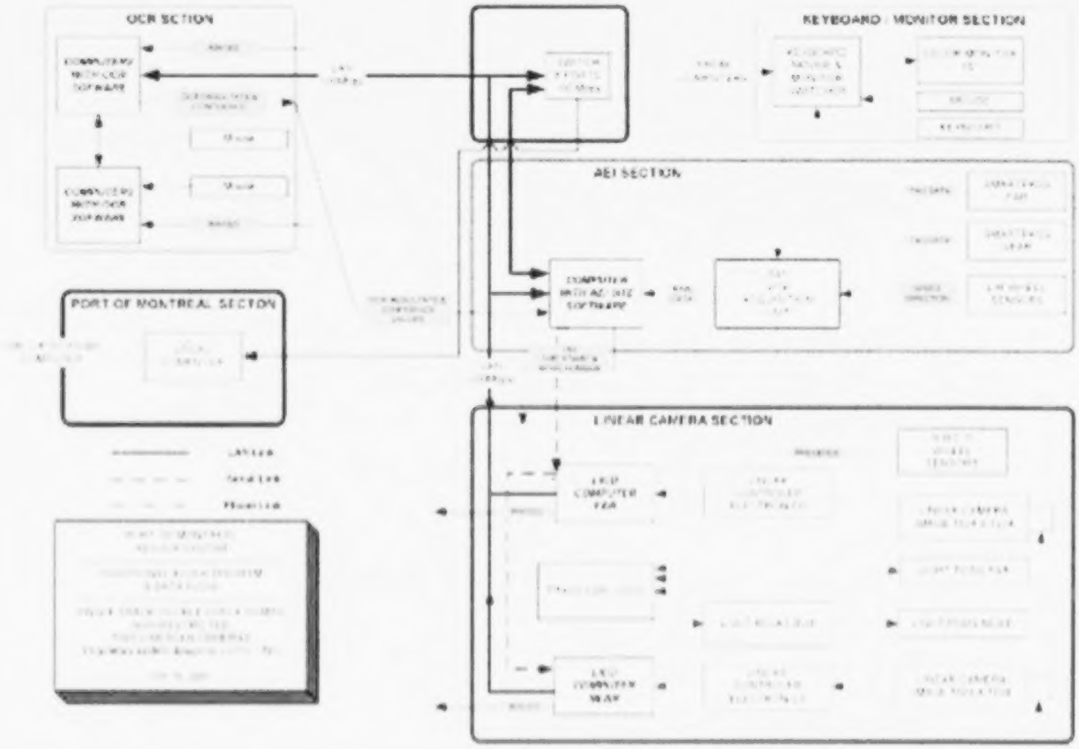

OCR SECTION
KEYBOARD / MONITOR SECTION
AEI SECTION
PORT OF MONTREAL SECTION
LINEAR CAMERA SECTION
LOCAL COMPUTER EAST
LAN Link
Serial Link
Power Link

Figure 2 Plan of the revised architecture

3.2.2 Reviewed LAN topology

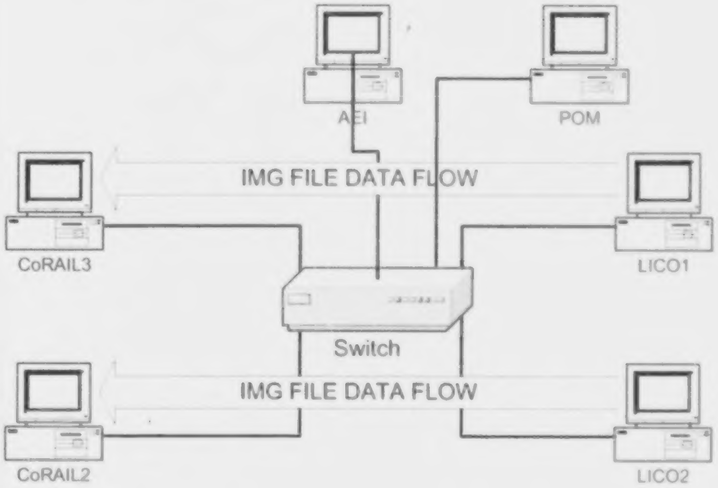


Figure 3 Plan of the new topology

3.2.3 Description of the changes introduced to the system

The following is a list of approved changes made to the system configuration (dated December 2000):

1. Elimination of Novell server by CCTC in accordance with the request formulated by DTI. File transfer is executed through the use of map drives between computers;
2. Replacement by DTI of the existing cables with new 100 Mbps shielded cables;
3. Upgrade of the operating system of the CoRAILx stations (from MS-Windows NT4 to MS-Windows 2000 Pro) by DTI;
4. Replacement of the existing network cards with 3COM network cards forced at 100 Mbps on the LICO stations (by CCTC) and on the CoRAIL stations (by DTI);
5. Hard drive defragmentation on the CoRAILx stations by DTI;
6. Upgrade of the existing software on the CoRAILx stations (except for the application developed by INO) by DTI.

3.3 Control Process During the Test Period at the Port of Montreal Site

The acceptance tests were supervised by DTI with the ad hoc collaboration of CCTC.

Since the Port of Montreal had deactivated all telephone lines connected to the site, DTI visited the site on the morning of each business day (except for Tuesday, August 28) to verify the condition of the system/hardware and collect the previous day's data.

When necessary, DTI requested CCTC's help to solve certain problems regarding the system's hardware and software configuration (e.g., cameras, lights, AEI and LICO software).

4 OBSERVATIONS

4.1 Weather Conditions

Tables 3 and 4 summarize the weather conditions observed at Montreal's Dorval Airport during this period. Table 3 presents the general weather conditions on a daily basis and Table 4 presents them by time slot.

Table 3 Weather conditions (on a daily basis)

DATE	Average temperature (C)	Total precipitation (mm)	Hours of sunshine
2001-08-22	24.1	0	12.1
2001-08-23	21.6	0	3.2
2001-08-24	17.8	0	13.2
2001-08-25	18	0	12.6
2001-08-26	21.8	10	3.6
2001-08-27	21.1	0	11
2001-08-28	18.9	0 Trace	2.6
2001-08-29	14.9	0	7.4
2001-08-30	16.9	0	12.4
2001-08-31	22.7	12.5	3.2
2001-09-01	13.9	0	9.1
2001-09-02	12.8	0	11.8
2001-09-03	20.5	0	10.4
2001-09-04	17.6	7	5.7
2001-09-05	15.4	0	12.2

Table 4 Weather conditions (by time slot)

DATE	HOUR	WIND AVERAGE SPEED (KM/H)	WIND DIRECTION	TEMP. (C)	HUMIDITY (%)	RAIN (MM)
2001-08-22	06H-12H	15.14	S-W	23.4	73	
	13H-19H	22.57	S-W	27.7	46	
	20H-05H	13.70	S-W	21.3	64	
2001-08-23	06H-12H	17.43	S-W	22.3	67	
	13H-19H	17.57	S-W	23.4	76	
	20H-05H	19.90	N	18.0	68	
2001-08-24	06H-12H	16.86	N	16.8	54	
	13H-19H	8.57	N-E	21.4	42	
	20H-05H	5.80	N-E	14.9	65	
2001-08-25	06H-12H	6.29	S-E	18.0	58	
	13H-19H	8.43	S-E	23.8	37	
	20H-05H	7.00	S-E	18.6	63	
2001-08-26	06H-12H	18.86	S-E	22.4	68	
	13H-19H	20.29	S	25.5	62	2
	20H-05H	13.40	N-W	19.7	93	8
2001-08-27	06H-12H	8.57	N-W	20.2	77	
	13H-19H	20.57	S-W	24.1	65	
	20H-05H	12.90	S-W	19.9	79	
2001-08-28	06H-12H	10.43	S-W	20.6	76	
	13H-19H	15.14	W	20.9	74	
	20H-05H	10.50	N-W	14.8	90	
2001-08-29	06H-12H	9.86	N-W	15.2	67	
	13H-19H	14.43	N-W	17.7	53	
	20H-05H	4.00	N	11.1	80	
2001-08-30	06H-12H	10.00	S	17.9	67	1
	13H-19H	15.57	S	23.8	52	
	20H-05H	13.70	S	19.9	76	
2001-08-31	06H-12H	16.43	S-W	23.9	74	
	13H-19H	19.86	S-W	23.5	79	3.5
	20H-05H	16.30	N-W	17.2	90	8
2001-09-01	06H-12H	18.00	N-W	14.9	65	
	13H-19H	15.86	N-W	17.1	51	
	20H-05H	7.40	N	9.7	77	
2001-09-02	06H-12H	4.57	E	12.8	49	
	13H-19H	13.00	S-W	17.4	41	
	20H-05H	15.40	S	15.0	66	
2001-09-03	06H-12H	18.86	S	20.3	68	
	13H-19H	18.43	S	25.5	47	
	20H-05H	13.60	S	19.7	73	0.5
2001-09-04	06H-12H	14.43	S-W	19.7	88	6.5
	13H-19H	21.00	N	20.1	72	
	20H-05H	13.20	N	12.6	73	
2001-09-05	06H-12H	13.14	N	15.7	54	
	13H-19H	9.14	N-W	19.2	41	0.5
	20H-05H	7.80	W	12.5	76	

The tests were conducted in late summer 2001 and, according to the data collected, under optimal conditions, contrary to the first test series run in November 2000. Dorval recorded precipitation on only three days out of a total of 15. Moreover, during the period, ten days had more than seven hours of sunshine and the other two days were cloudier (i.e., about three hours of sunshine recorded).

4 OBSERVATIONS

4.1 Weather Conditions

Tables 3 and 4 summarize the weather conditions observed at Montreal's Dorval Airport during this period. Table 3 presents the general weather conditions on a daily basis and Table 4 presents them by time slot.

Table 3 Weather conditions (on a daily basis)

DATE	Average temperature (C)	Total precipitation (mm)	Hours of sunshine
2001-08-22	24.1	0	12.1
2001-08-23	21.6	0	3.2
2001-08-24	17.8	0	13.2
2001-08-25	18	0	12.6
2001-08-26	21.8	10	3.6
2001-08-27	21.1	0	11
2001-08-28	18.9	0 Trace	2.6
2001-08-29	14.9	0	7.4
2001-08-30	16.9	0	12.4
2001-08-31	22.7	12.5	3.2
2001-09-01	13.9	0	9.1
2001-09-02	12.8	0	11.8
2001-09-03	20.5	0	10.4
2001-09-04	17.6	7	5.7
2001-09-05	15.4	0	12.2

Table 4 Weather conditions (by time slot)

DATE	HOUR	WIND AVERAGE SPEED (KM/H)	WIND DIRECTION	TEMP. (C)	HUMIDITY (%)	RAIN (MM)
2001-08-22	06H-12H	15.14	S-W	23.4	73	
	13H-19H	22.57	S-W	27.7	46	
	20H-05H	13.70	S-W	21.3	64	
2001-08-23	06H-12H	17.43	S-W	22.3	67	
	13H-19H	17.57	S-W	23.4	76	
	20H-05H	19.90	N	18.0	68	
2001-08-24	06H-12H	16.86	N	16.8	54	
	13H-19H	8.57	N-E	21.4	42	
	20H-05H	5.80	N-E	14.9	65	
2001-08-25	06H-12H	6.29	S-E	18.0	58	
	13H-19H	8.43	S-E	23.8	37	
	20H-05H	7.00	S-E	18.6	63	
2001-08-26	06H-12H	18.86	S-E	22.4	68	
	13H-19H	20.29	S	25.5	62	2
	20H-05H	13.40	N-W	19.7	93	8
2001-08-27	06H-12H	8.57	N-W	20.2	77	
	13H-19H	20.57	S-W	24.1	65	
	20H-05H	12.90	S-W	19.9	79	
2001-08-28	06H-12H	10.43	S-W	20.6	76	
	13H-19H	15.14	W	20.9	74	
	20H-05H	10.50	N-W	14.8	90	
2001-08-29	06H-12H	9.86	N-W	15.2	67	
	13H-19H	14.43	N-W	17.7	53	
	20H-05H	4.00	N	11.1	80	
2001-08-30	06H-12H	10.00	S	17.9	67	1
	13H-19H	15.57	S	23.8	52	
	20H-05H	13.70	S	19.9	76	
2001-08-31	06H-12H	16.43	S-W	23.9	74	
	13H-19H	19.86	S-W	23.5	79	3.5
	20H-05H	16.30	N-W	17.2	90	8
2001-09-01	06H-12H	18.00	N-W	14.9	65	
	13H-19H	15.86	N-W	17.1	51	
	20H-05H	7.40	N	9.7	77	
2001-09-02	06H-12H	4.57	E	12.8	49	
	13H-19H	13.00	S-W	17.4	41	
	20H-05H	15.40	S	15.0	66	
2001-09-03	06H-12H	18.86	S	20.3	68	
	13H-19H	18.43	S	25.5	47	
	20H-05H	13.60	S	19.7	73	0.5
2001-09-04	06H-12H	14.43	S-W	19.7	88	6.5
	13H-19H	21.00	N	20.1	72	
	20H-05H	13.20	N	12.6	73	
2001-09-05	06H-12H	13.14	N	15.7	54	
	13H-19H	9.14	N-W	19.2	41	0.5
	20H-05H	7.80	W	12.5	76	

The tests were conducted in late summer 2001 and, according to the data collected, under optimal conditions, contrary to the first test series run in November 2000. Dorval recorded precipitation on only three days out of a total of 15. Moreover, during the period, ten days had more than seven hours of sunshine and the other two days were cloudier (i.e., about three hours of sunshine recorded).

The average temperatures recorded during this period were from a minimum of 9.7°C to a maximum of 27.7°C.

To summarize, the weather was relatively clement ánd had little impact on the containers, the installed equipment, or the images captured by the cameras.

4.2 Trains Observed

During the test period, 113 train moves were observed (from #134 to #246). Table 5 provides a classification of these moves.

Table 5 Classification of the observed moves

Type of train	# of trains	%
Simulation	6	5.31 %
Empty move	14	12.39 %
Locomotive only	18	15.93 %
Train without containers	39	34.51 %
Train with containers	34	30.09 %
Exception: Synchronization error (#194)	1	0.88 %
Exception: CN truck on rails (#182)	1	0.88 %
Total # of trains	**113**	

The 34 trains with containers (or 30% of the observed moves) were used in the character recognition accuracy analysis.

Table 6 presents information on these moves generated by the AEI station during the test period and comments on the type of move observed.

Fourteen of these moves were identified as empty ones. Some of these moves were probably initiated with the inadvertent activation of the wheel sensors by the 4x4 vehicles used by the staff of the Mosaïcultures exhibition, whose coordinating centre was located near the site. These sensors were possibly activated on the motion sensor on the east side of the site, which is located in the line of access to the building (see Figure 4).

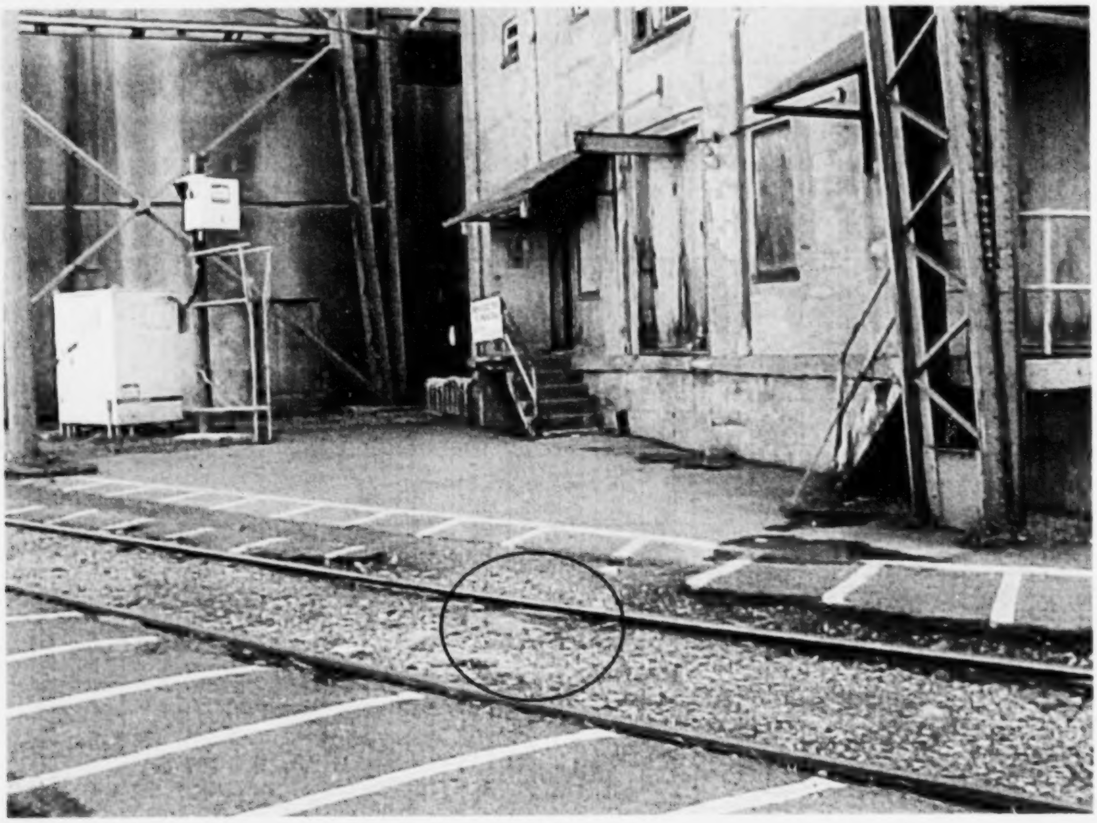


Figure 4 **Location of the eastbound move sensor**

Table 6 Move information

DTI

Move Information

Date	Move	Move Time	Lead	Engine	Dir.	Speed (mph)	Axle	Cars	Tags	Length	xTra	Comments
22-08-2001	134	16:09:48			E	9	8	2	0	125	T	Locomotive only
	135	16:34:05			W	5	28	7	5	440	T	Train without containers
	136	17:46:43									R	Empty move
	137	17:54:55	CN	7232	WR	11	48	12	11	702	T	Train without containers
	138	18:38:06	CN	7232	WR	7	76	19	19	1112	T	Train without containers
	139	18:49:22									R	Empty move
	140	18:51:49	CN	7232	WR	8	24	6	6	348	T	Train without containers
23-08-2001	141	05:02:08	CN	7232	W	9	216	20	109	4121	T	Train with containers
	142	05:38:42	CN	227	E	11	196	17	83	3829	T	Train with containers
	143	14:32:00									R	Empty move
	144	18:17:01	CN	7275	WR	8	128	32	34	1864	T	Train without containers
	145	18:24:46			WR	6	42	11	10	594	T	Train without containers
	146	18:29:22			WR	8	30	8	8	417	T	Train without containers
	147	18:31:36	CN	7275	E	15	12	3	2	180	T	Locomotive only
	148	18:51:54	CN	7275	WR	7	20	5	5	289	T	Train without containers
	149	18:59:47	CN	7275	WR	11	112	28	28	1644	T	Train without containers
24-08-2001	150	04:23:21	CN	7275	W	9	232	24	151	5086	T	Train with containers
	151	04:58:14	CN	275	E	16	25	5	10	486	T	Train with containers
	152	16:20:36			E	9	12	3	1	187	T	Train without containers
	153	16:53:45			WR	6	72	18	16	1037	T	Train without containers
	154	17:58:46									R	Empty move
	155	18:00:20	CN	7247	WR	8	88	22	23	1286	TR	Train without containers
	156	18:30:14	CN	7247	WR	4	20	5	5	285	T	Train without containers
	157	18:42:35	CN	7247	WR	11	92	23	23	1332	T	Train without containers
25-08-2001	158	03:04:12	CN	7247	W	12	8	2	2	112	T	Locomotive only
	159	03:21:21	CN	232	E	16	192	20	20	4387	T	Train with containers
	160	05:51:58	CN	7247	W	8	260	27	139	5417	T	Train with containers
	161	06:28:56	CN	232	E	11	244	25	114	4768	T	Train with containers
26-08-2001	162	00:54:16	CN	7275	W	14	8	2	2	112		Locomotive only
	163	01:22:26	CN	275	E	8	305	32	32	6668	T	Train with containers
	164	04:23:35	CN	7275	W	13	116	13	36	2986	T	Train with containers
	165	05:00:38	CN	275	E	14	204	18	60	4049	T	Train with containers
	166	09:23:35	CN	7247	WR	7	44	11	25	640	T	Train without containers
	167	09:35:23	CN	7247	WR	12	40	10	11	584	TR	Train without containers
27-08-2001	168	04:04:24	CN	7247	W	9	100	9	9	1824	T	Train with containers
	169	04:44:25	CN	232	E	7	82	10	38	1631	T	Train with containers
	170	05:05:45			E	10	84	8	32	1900	T	Train with containers
	171	11:31:09			E	8	12	3	1	174	T	Locomotive only
	172	11:44:47			W	6	8	2	0	82	T	Locomotive only
	173	13:21:48		SIMULATION								SIMULATION
	174											Empty move
	175											Empty move
	176											Empty move
	177	15:39:08			E	8	24	6	4	407	T	Train without containers
	178	16:35:04			WS	7	90	23	19	1286	T	Train without containers
	179	18:30:56			WR	9	52	13	13	755	TR	Train without containers
28-08-2001	180	04:26:19	CN	7233	W	8	213	21	21	4374	T	Train with containers. SUREXPOSURE
	181	05:01:24	CN	207	E	18	100	11	16	2333	T	Train with containers. SUREXPOSURE
	182	12:59:31			E	4	1	1	0	13	T	CN truck on rails. SUREXPOSURE
	183											Empty move
	184	17:54:11	CN	7233	WR	7	64	16	16	922	T	Train without containers. SUREXPOSURE
	185	18:02:48	CN	7233	WR	6	12	3	3	164		Train without containers. SUREXPOSURE
	186	18:12:21	CN	7233	WR	11	64	16	16	932	TR	Train without containers. SUREXPOSURE
29-08-2001	187	00:07:48	*		E	5	8	2	1	112	T	Train without containers. SUREXPOSURE
	188	00:41:36			W	3	4	1	0	46	T	Locomotive only. SUREXPOSURE
	189	03:51:33	CN	7249	W	9	188	17	17	3862	T	Train with containers. SUREXPOSURE
	190	05:15:06	CN	259	E	12	124	13	13	2582	T	Train with containers. SUREXPOSURE
	191	07:03:27	CN	7247	W	9	208	21	24	4174	T	Train with containers. SUREXPOSURE
	192	07:34:26	CN	232	E	8	8	2	4	112	T	Locomotive only. SUREXPOSURE
	193			SIMULATION								SIMULATION
	194	09:28:46			W	1	1	1	0	13	TR	Nothing for this move
	195	16:21:37			E	9	8	2	0	125	T	Locomotive only
	196	16:41:03			W	5	24	6	4	384	T	Train without containers
	197	17:47:39	CN	7233	WR	6	5	2	1	69	T	Locomotive only
	198	18:00:10	CN	7233	WR	11	44	11	11	640	T	Train without containers
	199	18:05:06	CN	7233	WR	11	72	18	18	1053	T	Train without containers

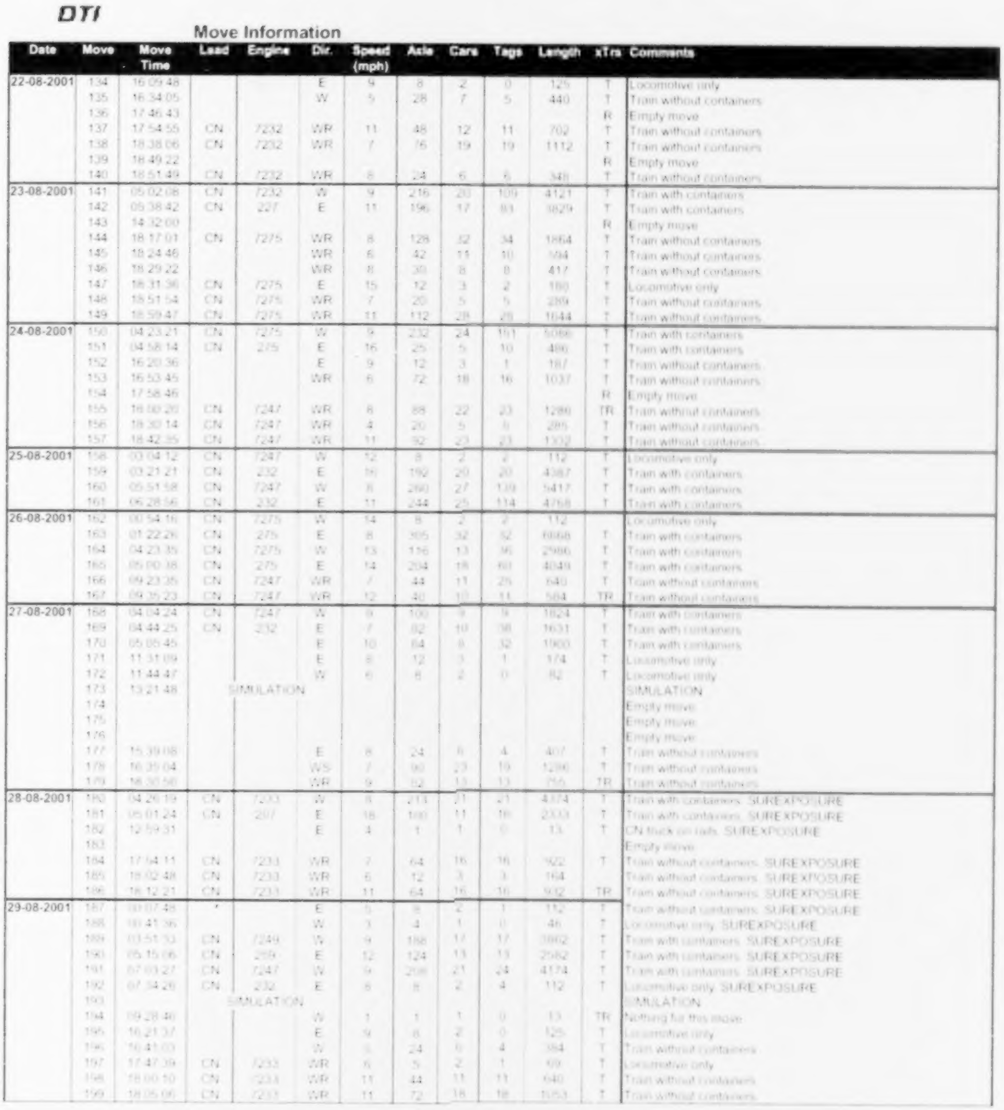
Table 6 (cont'd)

DTI

Move Information

Date	Move	Move Time	Lead	Engine	Dir.	Speed (mph)	Axle	Cars	Tags	Length	xTra	Comments
30-08-2001	200	03:46:33	CN	7233	W	9	252	27	27	5145	T	Train with containers, SUREXPOSURE
	201	04:35:31	CN	207	E	13	92	10	10	1956	T	Train with containers, SUREXPOSURE
	202			SIMULATION								SIMULATION
	203			SIMULATION								SIMULATION
	204			SIMULATION								SIMULATION
	205			SIMULATION								SIMULATION
	206											Empty move
	207	18:42:48	CN	7249	WR	10	12	3	3	171	T	Train without containers
31-08-2001	208	04:42:51	CN	7249	W	9	248	26	26	4965	T	Train with containers
	209	05:21:10	CN	259	E	15	48	7	7	1109	T	Train with containers
	210	09:40:42			E	7	4	1	0	52	T	Locomotive only
	211	10:01:08			W	6	8	2	1	112	T	Locomotive only
	212	12:22:06	CN	7249	WR	5	52	13	12	774	T	Train without containers
	213											Empty move
01-09-2001	214	01:49:19	CN	7249	W	14	8	2	2	112	T	Locomotive only
	215	02:16:10	CN	259	E	10	228	24	24	4650	T	Train with containers
	216	05:32:47	CN	7249	W	12	184	18	18	3554	T	Train with containers
	217	06:09:55	CN	259	E	12	212	21	21	4236	T	Train with containers
02-09-2001	218	01:23:48	CN	7249	W	15	8	2	2	112	T	Locomotive only
	219	01:56:02	CN	259	E	10	200	17	17	4115	T	Train with containers
	220	04:07:49	CN	7249	W	10	80	12	12	1555	T	Train with containers
	221	04:42:38	CN	259	E	10	228	28	26	4545	T	Train with containers
	222	10:59:25	CN	7249	WR	7	24	6	6	348	T	Train without containers
	223	11:03:00	CN	7249	W	7	8	2	2	112	T	Locomotive only
	224	11:36:34	CN	259	E	10	176	17	17	3373	T	Train with containers
	225	16:01:37			E	5	16	4	3	226	T	Train without containers
	226	16:40:56			W	5	4	1	0	53	T	Locomotive only
03-09-2001	227	02:03:26	CN	7247	W	10	152	14	14	3042	T	Train with containers
	228	03:06:08	CN	232	E	9	148	14	14	3071	T	Train with containers
	229											Empty move
	230	18:13:06	CN	7233	WR	10	52	13	12	761	T	Train without containers
	231											Empty move
	232	19:13:05	CN	7233	WR	8	64	16	16	935	T	Train without containers
	233											Empty move
04-09-2001	234	11:15:30			E	9	2	1	0	26	T	Locomotive only
	235	11:33:01			E	11	21	4	2	390	T	Train without containers
	236	11:50:51			W	8	8	2	0	112	T	Train without containers
	237	12:26:31	CN	2526	W	8	412	102	103	6041	T	Train without containers
	238	13:23:14	CN	2599	E	7	12	2	2	148		Train without containers
05-09-2001	239	02:25:53	CN	7247	W	13	60	7	7	1185	T	Train with containers
	240	02:58:06	CN	232	E	10	84	11	11	1532	T	Train with containers
	241	05:07:02	CN	7247	W	12	264	26	26	5588	T	Train with containers
	242	05:33:34	CN	232	E	13	8	2	2	112	T	Train without containers
	243	10:54:23			E	8	8	2	0	105	T	Train without containers
	244											Empty move
	245	11:12:24			W	9	2	1	0	13	TR	Locomotive only
	246	11:40:24			E	6	6	2	0	82	T	Train without containers

Table 6 Move information



DTI

Move Information

Date	Move	Move Time	Lead	Engine	Dir.	Speed (mph)	Axle	Cars	Tags	Length	xTrs	Comments
22-08-2001	134	16 09 48			E	9	8	2	0	125	T	Locomotive only
	135	16 34 05			W	5	28	7	5	440	T	Train without containers
	136	17 46 43									R	Empty move
	137	17 54 55	CN	7232	WR	11	48	12	11	702	T	Train without containers
	138	18 38 06	CN	7232	WR	7	76	19	19	1112	T	Train without containers
	139	18 49 22									R	Empty move
	140	18 51 49	CN	7232	WR	8	24	6	6	348	T	Train without containers
23-08-2001	141	05 02 08	CN	7232	W	9	216	20	109	4121	T	Train with containers
	142	05 38 42	CN	227	E	11	196	17	83	3829	T	Train with containers
	143	14 32 00									R	Empty move
	144	18 17 01	CN	7275	WR	8	128	32	34	1864	T	Train without containers
	145	18 24 46			WR	6	42	11	10	594	T	Train without containers
	146	18 29 22			WR	8	30	8	8	417	T	Train without containers
	147	18 31 36	CN	7275	E	15	12	3	2	180	T	Locomotive only
	148	18 51 54	CN	7275	WR	7	20	5	5	289	T	Train without containers
	149	18 59 47	CN	7275	WR	11	112	28	28	1644	T	Train without containers
24-08-2001	150	04 23 21	CN	7275	W	9	232	24	151	5086	T	Train with containers
	151	04 58 14	CN	275	E	16	25	5	10	486	T	Train with containers
	152	16 20 36			E	9	12	3	1	187	T	Train without containers
	153	16 53 45			WR	6	72	18	16	1037	T	Train without containers
	154	17 58 46									R	Empty move
	155	18 00 20	CN	7247	WR	8	88	22	23	1286	TR	Train without containers
	156	18 30 14	CN	7247	WR	4	20	5	6	285	T	Train without containers
	157	18 42 35	CN	7247	WR	11	92	23	23	1332	T	Train without containers
25-08-2001	158	03 04 12	CN	7247	W	12	8	2	2	112	T	Locomotive only
	159	03 21 21	CN	232	E	16	192	20	20	4387	T	Train with containers
	160	05 51 58	CN	7247	W	8	280	27	139	5417	T	Train with containers
	161	06 28 56	CN	232	E	11	244	25	114	4768	T	Train with containers
26-08-2001	162	00 54 16	CN	7275	W	14	8	2	2	112		Locomotive only
	163	01 22 26	CN	275	E	8	305	32	32	6868	T	Train with containers
	164	04 23 35	CN	7275	W	13	116	13	36	2986	T	Train with containers
	165	05 00 38	CN	275	E	14	204	18	60	4049	T	Train with containers
	166	09 23 35	CN	7247	WR	7	44	11	25	640	T	Train without containers
	167	09 35 23	CN	7247	WR	12	40	10	11	584	TR	Train without containers
27-08-2001	168	04 04 24	CN	7247	W	9	100	9	9	1824	T	Train with containers
	169	04 44 25	CN	232	E	7	82	10	38	1631	T	Train with containers
	170	05 05 45			E	10	64	8	32	1900	T	Train with containers
	171	11 31 09			E	8	12	3	1	174	T	Locomotive only
	172	11 44 47			W	6	8	2	0	82	T	Locomotive only
	173	13 21 48		SIMULATION								SIMULATION
	174											Empty move
	175											Empty move
	176											Empty move
	177	15 39 08			E	8	24	6	4	407	T	Train without containers
	178	16 35 04			WS	7	90	23	19	1286	T	Train without containers
	179	18 30 56			WR	9	52	13	13	756	TR	Train without containers
28-08-2001	180	04 26 19	CN	7233	W	8	213	21	21	4374	T	Train with containers. SUREXPOSURE
	181	05 01 24	CN	207	E	18	100	11	16	2333	T	Train with containers. SUREXPOSURE
	182	12 59 31			E	4	1	1	0	13	T	CN truck on rails. SUREXPOSURE
	183											Empty move
	184	17 54 11	CN	7233	WR	7	64	16	16	922	T	Train without containers. SUREXPOSURE
	185	18 02 48	CN	7233	WR	6	12	3	3	164		Train without containers. SUREXPOSURE
	186	18 12 21	CN	7233	WR	11	64	16	16	932	TR	Train without containers. SUREXPOSURE
29-08-2001	187	00 07 48	*		E	5	8	2	1	112	T	Train without containers. SUREXPOSURE
	188	00 41 36			W	3	4	1	0	46	T	Locomotive only. SUREXPOSURE
	189	03 51 33	CN	7249	W	9	188	17	17	3862	T	Train with containers. SUREXPOSURE
	190	05 15 06	CN	259	E	12	124	13	13	2582	T	Train with containers. SUREXPOSURE
	191	07 03 27	CN	7247	W	9	208	21	24	4174	T	Train with containers. SUREXPOSURE
	192	07 34 26	CN	232	E	8	8	2	4	112	T	Locomotive only. SUREXPOSURE
	193			SIMULATION								SIMULATION
	194	09 28 46			W	1	1	1	0	13	TR	Nothing for this move
	195	16 21 37			E	9	8	2	0	125	T	Locomotive only
	196	16 41 03			W	5	24	6	4	384	T	Train without containers
	197	17 47 39	CN	7233	WR	6	5	2	1	69	T	Locomotive only
	198	18 00 10	CN	7233	WR	11	44	11	11	640	T	Train without containers
	199	18 05 06	CN	7233	WR	11	72	18	18	1053	T	Train without containers

Table 6 (cont'd)

DTI

Move Information

Date	Move	Move Time	Lead	Engine	Dir.	Speed (mph)	Axle	Cars	Tags	Length	xTra	Comments
30-08-2001	200	03 46 33	CN	7233	W	9	252	27	27	5145	T	Train with containers. SUREXPOSURE
	201	04 35 31	CN	207	E	13	92	10	10	1956	T	Train with containers. SUREXPOSURE
	202			SIMULATION								SIMULATION
	203			SIMULATION								SIMULATION
	204			SIMULATION								SIMULATION
	205			SIMULATION								SIMULATION
	206											Empty move
	207	18 42 48	CN	7249	WR	10	12	3	3	171	T	Train without containers
31-08-2001	208	04 42 51	CN	7249	W	9	248	26	26	4965	T	Train with containers
	209	05 21 10	CN	259	E	15	48	7	7	1109	T	Train with containers
	210	09 40 42			E	7	4	1	0	52	T	Locomotive only
	211	10 01 08			W	6	8	2	1	112	T	Locomotive only
	212	12 22 06	CN	7249	WR	5	52	13	12	774	T	Train without containers
	213											Empty move
01-09-2001	214	01 49 19	CN	7249	W	14	8	2	2	112	T	Locomotive only
	215	02 16 10	CN	259	E	10	228	24	24	4656	T	Train with containers
	216	05 32 47	CN	7249	W	12	184	18	18	3554	T	Train with containers
	217	06 09 55	CN	259	E	12	212	21	21	4236	T	Train with containers
02-09-2001	218	01 23 48	CN	7249	W	15	8	2	2	112	T	Locomotive only
	219	01 56 02	CN	259	E	10	200	17	17	4115	T	Train with containers
	220	04 07 49	CN	7249	W	10	80	12	12	1555	T	Train with containers
	221	04 42 38	CN	259	E	10	228	28	28	4545	T	Train with containers
	222	10 59 25	CN	7249	WR	7	24	6	6	348	T	Train without containers
	223	11 03 00	CN	7249	W	7	8	2	2	112	T	Locomotive only
	224	11 36 34	CN	259	E	10	176	17	17	3373	T	Train with containers
	225	16 01 37			E	5	16	4	1	226	T	Train without containers
	226	16 40 56			W	5	4	1	0	53	T	Locomotive only
03-09-2001	227	02 03 26	CN	7247	W	10	152	14	14	3042	T	Train with containers
	228	03 06 08	CN	232	E	9	148	14	14	3071	T	Train with containers
	229											Empty move
	230	18 13 06	CN	7233	WR	10	52	13	12	761	T	Train without containers
	231											Empty move
	232	19 13 05	CN	7233	WR	8	64	16	16	808	T	Train without containers
	233											Empty move
04-09-2001	234	11 15 30			E	9	2	1	0	26	T	Locomotive only
	235	11 33 01			E	11	21	4	2	390	T	Train without containers
	236	11 50 51			W	8	8	2	0	112	T	Train without containers
	237	12 26 31	CN	2526	W	8	412	102	101	6041	T	Train without containers
	238	13 23 14	CN	2599	E	7	12	2	2	148		Train without containers
05-09-2001	239	02 25 53	CN	7247	W	13	60	7	7	1185	T	Train with containers
	240	02 58 06	CN	232	E	10	84	11	11	1532	T	Train with containers
	241	05 07 02	CN	7247	W	12	294	26	26	5588	T	Train with containers
	242	05 33 34	CN	232	E	13	8	2	2	112	T	Train without containers
	243	10 54 23			E	8	8	2	0	106	T	Train without containers
	244											Empty move
	245	11 12 24			W	9	2	1	0	13	TR	Locomotive only
	246	11 40 24			E	6	8	2	0	82	T	Train without containers

4.3 Chronology of Events

Table 7 presents the chronology of the events that occurred during the test period and the actions taken regarding these events.

On August 21, 2001, the day before the start of the acceptance test period, certain events occurred. From the beginning of the acceptance pre-tests, camera 1 images were completely black. Both cameras had also lost the pilot lights responsible for opening the camera lenses. CCTC reconnected a camera 1 module, which corrected the problem of the black images. CCTC also adjusted the OCR reference lights and the calibration target lights for each camera.

Table 7 Events during the acceptance tests period

Date	Events	Actions Taken
August 22	Start of acceptance tests at 12:00.	
August 24	Clearer images for camera 2. The light for camera 1 had to be adjusted. The bottom reference light for the containers not properly centered.	Problem solved on August 27 by CCTC.
August 27	Synchronization problem between LICO stations and the AEI. One Solid State Relay failed. CCTC present on the site at DTI's request.	For train #173, DTI ran a simulation to restore the situation. CCTC connected what was on the defective Solid State Relay to another circuit. CCTC adjusted all the lights for camera 1: target light, reference lights, and spotlights.
August 28	CCTC was supposed to change the Solid State Relay, which failed on August 27. This was not done.	
August 29	Synchronization problem between the LICO and the AEI. In the morning, one light breaker was OFF.	For train 193, DTI ran a simulation to restore the train numbers. DTI communicated with CCTC to confirm the replacement date of the Solid State Relay. The breaker was switched back ON by DTI.
August 30	Synchronization problem between the LICO and the AEI. One light fuse was still OFF.	For trains 202, 203, 204, and 205, DTI ran simulations to restore the situation. CCTC adjusted the wheel sensors. CCTC came to replace the Solid State Relay 25A will a 45A for Light POD 1. This breaker was switched back ON.
September 5	Problem with the lights. The Solid State Relay for Light POD 4 no longer working. The top spotlights for camera 2 were lost. The top reference light for camera 1 was also lost. At 11:15, the 4 light breakers were closed by DTI at the end of the test period.	The Port of Montreal was notified of the situation.

On September 6th, 2001, the day after the end of the test period, DTI visited the site to shut down the computers. When they arrived, a problem was observed on the LICO2 station, which accessed the CoRAIL2 station for data transfer. It had an expired password, preventing access to CoRAIL2. To solve the problem, DTI checked off the 'Password never expires' box for all stations and all user accounts. Following this action, all the computers were shut down.

During this period, three move numbers were desynchronized between the AEI station and the LICOx stations: from #157 to #172 (difference of 1), from #179 to #192 (difference of 1) and from #195 to #201 (difference of 4). After resynchronization of the numerical sequence between the stations, a certain number of simulated train moves were created. A total of six simulations were run during the test period (#173, #193, and #202 to #205). Following simulation #193, data from move #194 were lost.

On August 27th, a Solid State Relay (SSR) failed during the adjustments made by CCTC. They repaired it on August 30th. This caused an overexposure problem for the images received in the interim. Table 8 presents the list of moves affected by this problem.

Table 8 Overexposure problem – list of affected moves

Move	Date	Move time	Description
180	2001-08-28	04:26:19	Train with containers
181		05:01:24	Train with containers
182		12:59:31	CN truck on rails
184		17:54:11	Train without containers
185		18:02:48	Train without containers
186		18:12:21	Train without containers
187	2001-08-29	00:07:48	Train without containers
188		00:41:36	Locomotive only
189		03:51:33	Train with containers
190		05:15:06	Train with containers
191		07:03:27	Train with containers
192		07:34:26	Locomotive only
200	2001-08-30	03:46:33	Train with containers
201		04:35:31	Train with containers

By subtracting the empty moves listed above, a total of 92 moves were kept to analyze their processing time.

5 ANALYSIS

5.1 Processing Time

Contrary to the method used by INO during the first test series, DTI chose to base its processing-time analysis approach on the criteria presented in Section 3. Given that no move was similar to the specifications of a reference train move, DTI retained an assumption, accepted by all stakeholders, that met the specified processing time requirements.

To achieve the objective set by the Port of Montreal and Transport Canada, the system would have to process the passage of a train in a time less than or equal to the time set for processing a reference train, or 20 minutes after detection. However, it is absolutely essential that this 6000' train, which travels at a speed of 10 miles per hour (within the established standard of 15 mph 5), take 6 minutes 49 seconds to cross the site completely (maximum duration of a reference train move).

The breakdown by average length of the trains observed shows that the average processing time is less than the established duration (see Table 9).

Table 9 Breakdown by average length

Length (in feet)	No. of trains	Trains with cont.	Average no. of cont.	Average move time	Average process time
0 – 500	37	1	8	1 min 44 sec	2 min 52 sec
501 - 1000	9	0	0	4 min 15 sec	6 min 32 sec
1001 - 1500	6	2	22	5 min 51 sec	7 min 5 sec
1501 - 2000	8	6	37	4 min 4 sec	6 min 45 sec
2001 - 2500	1	1	41	2 min 30 sec	6 min 38 sec
2501 - 3000	2	2	46	3 min 42 sec	7 min 26 sec
3001 - 3500	3	3	78	4 min 52 sec	12 min 33 sec
3501 - 4000	3	3	58	5 min 38 sec	11 min 33 sec
4001 - 4500	7	7	113	5 min 40 sec	13 min 42 sec
4501 - 5000	4	4	124	7 min 46 sec	17 min 28 sec
5001 - 5500	3	3	116	10 min 40 sec	15 min 29 sec
5501 - 6000	1	1	166	7 min 1 sec	18 min 38 sec
6000 +	2	1	195	12 min 39 sec	19 min 4 sec
Total	**86**	**34**			

NOTE: 6 problem trains (#153, 167, 178, 186, 245, and 246) are not included in this table.

Table 10 presents the processing times noted for the train moves analyzed during the period. Note that performance is considered adequate if the two criteria mentioned above (i.e., 20 min. processing time and maximum duration of 6 min. 49 sec. for a reference move) are maintained. If this is not the case, the objective is not achieved. The overall network performance appears at the end of the table.

Table 10 Processing times

Date	Move no.	Speed			Length	Move duration	Move time	End process time	Process duration	Performance flag	Comments
		Min	Max	Average							
2001-08-22	134	8	9	9	125	0:00:58	16:09:48	16:11:14	0:01:26	1	
	135	4	6	5	440	0:06:42	16:34:05	16:41:28	0:07:23	1	
	137	1	16	11	702	0:02:47	17:54:55	17:59:02	0:04:07	1	
	138	1	11	7	1112	0:05:38	18:38:06	18:44:40	0:06:34	1	
	140	3	14	8	348	0:02:03	18:51:49	18:55:42	0:03:53	1	
2001-08-23	141	9	10	9	4121	0:06:14	5:02:08	5:15:48	0:13:40	1	
	142	6	14	11	3829	0:05:37	5:38:42	5:51:30	0:12:48	1	
	144	1	11	8	1864	0:07:21	18:17:01	18:25:20	0:08:19	1	
	145	1	9	6	594	0:04:18	18:24:46	18:31:54	0:07:08	1	
	146	1	14	8	417	0:02:13	18:29:22	18:33:30	0:04:08	1	
	147	14	17	15	180	0:00:48	18:31:36	18:34:24	0:02:48	1	
	148	4	10	7	289	0:02:47	18:51:54	18:55:12	0:03:18	1	
	149	1	18	11	1644	0:05:16	18:59:47	19:05:52	0:06:05	1	
2001-08-24	150	5	10	9	5086	0:11:23	4:23:21	4:40:30	0:17:09	1	
	151	14	18	16	486	0:01:11	4:58:14	5:00:58	0:02:44	1	
	152	8	9	9	187	0:01:04	16:20:36	16:21:58	0:01:22	1	
	153	3	9	6	1037	1:04:45	16:53:45	17:59:30	1:05:45	1	Move duration of 1:04:45
	155	1	16	8	1286	0:14:23	18:00:20	18:15:22	0:15:02	1	
	156	2	6	4	285	0:03:25	18:30:14	18:34:04	0:03:50	1	
	157	3	19	11	1332	0:05:35	18:42:35	18:47:24	0:04:49	1	
2001-08-25	158	12	13	12	112	0:00:49	3:04:12	3:05:14	0:01:02	1	
	159	12	19	16	4387	0:04:42	3:21:21	3:35:52	0:14:31	1	
	160	1	9	8	5417	0:12:48	5:51:58	6:08:06	0:16:08	1	
	161	6	14	11	4768	0:06:56	6:28:56	6:45:34	0:16:38	1	
2001-08-26	162	13	14	14	112	0:01:38	0:54:16	0:56:20	0:02:04	1	
	163	4	12	8	6668	0:13:01	1:22:26	1:46:54	0:24:28	1	Move duration over 6min 49sec
	164	11	14	13	2986	0:03:35	4:23:35	4:31:16	0:07:41	1	
	165	12	16	14	4049	0:04:39	5:00:38	5:13:14	0:12:36	1	
	166	4	10	7	640	0:03:24	9:23:35	9:27:56	0:04:21	1	
	167	7	17	12	584	0:02:27	9:35:23	28:06:58	18:31:35	0	End-of-train detection problem
2001-08-27	168	8	9	9	1824	0:04:00	4:04:24	4:12:46	0:08:22	1	
	169	3	9	7	1631	0:03:46	4:44:25	4:50:54	0:06:29	1	
	170	3	13	10	1900	0:03:20	5:05:45	5:12:34	0:06:49	1	
	171	8	9	8	174	0:01:05	11:31:09	11:32:38	0:01:29	1	
	172	6	7	6	82	0:00:58	11:44:47	11:45:58	0:01:11	1	
	177	7	9	8	407	0:01:25	15:39:08	15:56:38	0:17:30	1	
	178	1	10	7	1286	1:55:24	16:35:04	18:31:18	1:56:14	1	Move duration of 1:55:24
	179	2	16	9	755	0:06:08	18:30:56	18:36:30	0:05:34	1	
2001-08-28	180	7	10	8	4374	0:06:52	4:26:19	4:37:54	0:11:35	1	
	181	14	21	18	2333	0:02:30	5:01:24	5:08:02	0:06:38	1	
	182	4	4	4	13	0:05:46	12:59:31	13:05:50	0:06:19	1	
	184	0	10	7	922	0:07:14	17:54:11	18:02:00	0:07:49	1	
	185	6	7	6	164	0:02:07	18:02:48	18:05:10	0:02:22	1	
	186	1	17	11	932	0:03:20	18:12:21	24:10:18	5:57:57	0	End-of-train detection problem
2001-08-29	187	3	7	5	112	0:01:11	0:07:48	0:11:14	0:03:26	1	
	188	2	3	3	46	0:01:07	0:41:36	0:42:52	0:01:16	1	
	189	8	9	9	3862	0:06:09	3:51:33	4:00:26	0:08:53	1	
	190	11	12	12	2582	0:03:48	5:15:06	5:22:16	0:07:10	1	
	191	8	9	9	4174	0:06:27	7:03:27	7:13:36	0:10:09	1	
	192	8	8	8	112	0:01:00	7:34:26	7:35:52	0:01:26	1	
	195	8	9	9	125	0:00:58	16:21:37	16:22:46	0:01:09	1	
	196	5	6	5	384	0:06:28	16:41:03	16:48:14	0:07:11	1	
	197	2	10	6	69	0:01:35	17:47:39	17:49:32	0:01:53	1	
	198	0	16	11	640	0:03:09	18:00:10	18:04:20	0:04:10	1	
	199	2	17	11	1053	0:05:17	18:05:06	18:11:26	0:06:20	1	
2001-08-30	200	5	12	9	5145	0:07:48	3:46:33	3:59:42	0:13:09	1	
	201	11	18	13	1956	0:02:47	4:35:31	4:41:38	0:06:07	1	
	207	9	13	10	171	0:01:45	18:42:48	18:46:29	0:03:41	1	
2001-08-31	208	3	10	9	4965	0:11:55	4:42:51	5:00:22	0:17:31	1	
	209	15	16	15	1109	0:01:35	5:21:10	5:26:28	0:05:18	1	
	210	7	7	7	53	0:00:54	9:40:42	9:41:52	0:01:10	1	
	211	6	7	6	112	0:01:04	10:01:08	10:02:44	0:01:36	1	
	212	1	7	5	774	0:05:26	12:22:06	12:37:34	0:15:28	1	

Table 10 Processing times

Date	Move no.	Speed Min	Max	Average	Length	Move duration	Move time	End process time	Process duration	Performance flag	Comments
2001-08-22	134	8	9	9	125	0:00:58	16:09:48	16:11:14	0:01:26	1	
	135	4	6	5	440	0:06:42	16:34:05	16:41:28	0:07:23	1	
	137	1	16	11	702	0:02:47	17:54:55	17:59:02	0:04:07	1	
	138	1	11	7	1112	0:05:38	18:38:06	18:44:40	0:06:34	1	
	140	3	14	8	348	0:02:03	18:51:49	18:55:42	0:03:53	1	
2001-08-23	141	9	10	9	4121	0:06:14	5:02:08	5:15:48	0:13:40	1	
	142	6	14	11	3829	0:05:37	5:38:42	5:51:30	0:12:48	1	
	144	1	11	8	1864	0:07:21	18:17:01	18:25:20	0:08:19	1	
	145	1	9	6	594	0:04:18	18:24:46	18:31:54	0:07:08	1	
	146	1	14	8	417	0:02:13	18:29:22	18:33:30	0:04:08	1	
	147	14	17	15	180	0:00:48	18:31:36	18:34:24	0:02:48	1	
	148	4	10	7	289	0:02:47	18:51:54	18:55:12	0:03:18	1	
	149	1	18	11	1644	0:05:16	18:59:47	19:05:52	0:06:05	1	
2001-08-24	150	5	10	9	5086	0:11:23	4:23:21	4:40:30	0:17:09	1	
	151	14	18	16	486	0:01:11	4:58:14	5:00:58	0:02:44	1	
	152	8	9	9	187	0:01:04	16:20:36	16:21:58	0:01:22	1	
	153	3	9	6	1037	1:04:45	16:53:45	17:59:30	1:05:45	1	Move duration of 1:04:45
	155	1	16	8	1286	0:14:23	18:00:20	18:15:22	0:15:02	1	
	156	2	6	4	285	0:03:25	18:30:14	18:34:04	0:03:50	1	
	157	3	19	11	1332	0:05:35	18:42:35	18:47:24	0:04:49	1	
2001-08-25	158	12	13	12	112	0:00:49	3:04:12	3:05:14	0:01:02	1	
	159	12	19	16	4387	0:04:42	3:21:21	3:35:52	0:14:31	1	
	160	1	9	8	5417	0:12:48	5:51:58	6:08:06	0:16:08	1	
	161	6	14	11	4768	0:06:56	6:28:56	6:45:34	0:16:38	1	
2001-08-26	162	13	14	14	112	0:01:38	0:54:16	0:56:20	0:02:04	1	
	163	4	12	8	6668	0:13:01	1:22:26	1:46:54	0:24:28	1	Move duration over [illegible]
	164	11	14	13	2986	0:03:35	4:23:35	4:31:16	0:07:41	1	
	165	12	16	14	4049	0:04:39	5:00:38	5:13:14	0:12:36	1	
	166	4	10	7	640	0:03:24	9:23:35	9:27:56	0:04:21	1	
	167	7	17	12	584	0:02:27	9:35:23	28:06:58	18:31:35	0	End of train detection problem
2001-08-27	168	8	9	9	1824	0:04:00	4:04:24	4:12:46	0:08:22	1	
	169	3	9	7	1631	0:03:46	4:44:25	4:50:54	0:06:29	1	
	170	3	13	10	1900	0:03:20	5:05:45	5:12:34	0:06:49	1	
	171	8	9	8	174	0:01:05	11:31:09	11:32:38	0:01:29	1	
	172	6	7	6	82	0:00:58	11:44:47	11:45:58	0:01:11	1	
	177	7	9	8	467	0:01:25	15:39:08	15:56:38	0:17:30	1	
	178	1	10	7	1286	1:55:24	16:35:04	18:31:18	1:56:14	1	Move duration of 1:55:24
	179	2	16	9	755	0:06:08	18:30:56	18:36:30	0:05:34	1	
2001-08-28	180	7	10	8	4374	0:06:52	4:26:19	4:37:54	0:11:35	1	
	181	14	21	18	2333	0:02:30	5:01:24	5:08:02	0:06:38	1	
	182	4	4	4	13	0:05:46	12:59:31	13:05:50	0:06:19	1	
	184	0	10	7	922	0:07:14	17:54:11	18:02:00	0:07:49	1	
	185	6	7	6	164	0:02:07	18:02:48	18:05:10	0:02:22	1	
	186	1	17	11	932	0:03:20	18:12:21	24:10:18	5:57:57	0	End of train detection problem
2001-08-29	187	3	7	5	112	0:01:11	0:07:48	0:11:14	0:03:26	1	
	188	2	3	3	46	0:01:07	0:41:36	0:42:52	0:01:16	1	
	189	8	9	9	3862	0:06:09	3:51:33	4:00:26	0:08:53	1	
	190	11	12	12	2582	0:03:48	5:15:06	5:22:16	0:07:10	1	
	191	8	9	9	4174	0:06:27	7:03:27	7:13:36	0:10:09	1	
	192	8	8	8	112	0:01:00	7:34:26	7:35:52	0:01:26	1	
	195	8	9	9	125	0:00:58	16:21:37	16:22:46	0:01:09	1	
	196	5	6	5	384	0:06:28	16:41:03	16:48:14	0:07:11	1	
	197	2	10	6	69	0:01:35	17:47:39	17:49:32	0:01:53	1	
	198	0	16	11	640	0:03:09	18:00:10	18:04:20	0:04:10	1	
	199	2	17	11	1053	0:05:17	18:05:06	18:11:26	0:06:20	1	
2001-08-30	200	5	12	9	5145	0:07:48	3:46:33	3:59:42	0:13:09	1	
	201	11	18	13	1956	0:02:47	4:35:31	4:41:38	0:06:07	1	
	207	9	13	10	171	0:01:45	18:42:48	18:46:29	0:03:41	1	
2001-08-31	208	3	10	9	4965	0:11:55	4:42:51	5:00:22	0:17:31	1	
	209	15	16	15	1109	0:01:35	5:21:10	5:26:28	0:05:18	1	
	210	7	7	7	53	0:00:54	9:40:42	9:41:52	0:01:10	1	
	211	6	7	6	112	0:01:04	10:01:08	10:02:44	0:01:36	1	
	212	1	7	5	774	0:05:26	12:22:06	12:37:34	0:15:28	1	

Table 10 (cont'd)

Date	Move no.	Speed Min	Max	Average	Length	Move duration	Move time	End process time	Process duration	Performance flag	Comments
2001-09-01	214	14	14	14	112	0:00:49	1:49:19	1:52:58	0:03:39	1	
	215	8	11	10	4650	0:06:09	2:16:10	2:35:08	0:18:58	1	
	216	10	12	12	3554	0:05:07	5:32:47	5:45:44	0:12:57	1	
	217	10	14	12	4236	0:05:06	6:09:55	6:27:50	0:17:55	1	
2001-09-02	218	15	15	15	112	0:00:48	1:23:48	1:25:02	0:01:14	1	
	219	10	10	10	4115	0:05:38	1:56:02	2:11:32	0:15:30	1	
	220	10	10	10	1555	0:03:26	4:07:49	4:13:52	0:06:03	1	
	221	8	10	10	4545	0:06:04	4:42:38	4:59:00	0:16:22	1	
	222	3	9	7	348	0:02:11	10:59:25	11:02:12	0:02:47	1	
	223	7	8	7	112	0:01:19	11:03:00	11:04:58	0:01:58	1	
	224	9	10	10	3373	0:04:45	11:36:34	11:49:18	0:12:44	1	
	225	3	6	5	226	0:01:25	16:01:37	16:03:36	0:01:59	1	
	226	4	5	5	53	0:01:01	16:40:56	16:42:12	0:01:16	1	
2001-09-03	227	10	10	10	3042	0:05:08	2:33:26	2:45:26	0:12:00	1	
	228	4	10	9	3071	0:04:44	3:06:08	3:19:04	0:12:56	1	
	230	4	14	10	761	0:03:05	18:13:06	18:17:44	0:04:38	1	
	232	2	10	8	935	0:04:13	19:13:05	19:18:42	0:05:37	1	
2001-09-04	234	9	9	9	26	0:00:49	11:15:30	11:18:28	0:02:58	1	
	235	10	11	11	390	0:01:11	11:33:01	11:34:50	0:01:49	1	
	236	8	8	8	112	0:00:56	11:50:51	11:51:36	0:00:45	1	
	237	1	11	8	6041	0:12:16	12:26:31	12:40:10	0:13:39	1	
	238	6	7	7	148	0:01:03	13:23:14	13:24:10	0:00:56	1	
2001-09-05	239	11	15	13	1185	0:02:38	2:25:53	2:30:22	0:04:29	1	
	240	10	11	10	1532	0:02:32	2:58:06	3:03:52	0:05:46	1	
	241	8	15	12	5588	0:07:01	5:07:02	5:25:40	0:18:38	1	
	242	12	14	13	112	0:00:50	5:33:34	5:34:12	0:00:38	1	
	243	7	8	8	105	0:00:55	10:54:12	10:54:54	0:00:42	1	
	245	8	9	9	13	0:27:53	11:12:24	11:42:00	0:29:36	1	Move duration of 0:27:53
	246	5	8	6	82	0:06:37	11:40:24	18:31:42	6:51:18	0	End of train detection problem

Number of moves :	92
Respect of criteria :	89
Processing time performance :	96.74%

Table 10 (cont'd)

Date	Move no	Speed			Length	Move duration	Move time	End process time	Process duration	Performance flag	Comments
		Min	Max	Average							
2001-09-01	214	14	14	14	112	0:00:49	1:49:19	1:52:58	0:03:39	1	
	215	8	11	10	4650	0:06:09	2:16:10	2:35:08	0:18:58	1	
	216	10	12	12	3554	0:05:07	5:32:47	5:45:44	0:12:57	1	
	217	10	14	12	4236	0:05:06	6:09:55	6:27:50	0:17:55	1	
2001-09-02	218	15	15	15	112	0:00:48	1:23:48	1:25:02	0:01:14	1	
	219	10	10	10	4115	0:05:38	1:56:02	2:11:32	0:15:30	1	
	220	10	10	10	1555	0:03:26	4:07:49	4:13:52	0:06:03	1	
	221	8	10	10	4545	0:06:04	4:42:38	4:59:00	0:16:22	1	
	222	3	9	7	348	0:02:11	10:59:25	11:02:12	0:02:47	1	
	223	7	8	7	112	0:01:19	11:03:00	11:04:58	0:01:58	1	
	224	9	10	10	3373	0:04:45	11:36:34	11:49:18	0:12:44	1	
	225	3	6	5	226	0:01:25	16:01:37	16:03:36	0:01:59	1	
	226	4	5	5	53	0:01:01	16:40:56	16:42:12	0:01:16	1	
2001-09-03	227	10	10	10	3042	0:05:08	2:33:26	2:45:26	0:12:00	1	
	228	4	10	9	3071	0:04:44	3:06:08	3:19:04	0:12:56	1	
	230	4	14	10	761	0:03:05	18:13:06	18:17:44	0:04:38	1	
	232	2	10	8	935	0:04:13	19:13:05	19:18:42	0:05:37	1	
2001-09-04	234	9	9	9	26	0:00:49	11:15:30	11:18:28	0:02:58	1	
	235	10	11	11	390	0:01:11	11:33:01	11:34:50	0:01:49	1	
	236	8	8	8	112	0:00:56	11:50:51	11:51:36	0:00:45	1	
	237	1	11	8	6041	0:12:16	12:26:31	12:40:10	0:13:39	1	
	238	6	7	7	148	0:01:03	13:23:14	13:24:10	0:00:56	1	
2001-09-05	239	11	15	13	1185	0:02:38	2:25:53	2:30:22	0:04:29	1	
	240	10	11	10	1532	0:02:32	2:58:06	3:03:52	0:05:46	1	
	241	8	15	12	5588	0:07:01	5:07:02	5:25:40	0:18:38	1	
	242	12	14	13	112	0:00:50	5:33:34	5:34:12	0:00:38	1	
	243	7	8	8	105	0:00:55	10:54:12	10:54:54	0:00:42	1	
	245	8	9	9	13	0:27:53	11:12:24	11:42:00	0:29:36	1	Move duration of 0:27:53
	246	5	8	6	82	0:06:37	11:40:24	18:31:42	6:51:18	0	End-of-train detection problem

Number of moves : 92
Respect of criteria : 89
Processing time performance : 96.74%

As indicated in Table 10, seven moves do not conform to the 20-minute limit. However, four of them have duration greater than the fixed maximum. These exceptions are listed in Table 11.

Table 11 Processing times - exceptions

Move #	Move duration	Processing duration
153	1 hr 4 min 45 sec	1 hr 5 min 45 sec
163	13 min 1 sec	24 min 28 sec
178	1 hr 55 min 24 sec	1 hr 56 min 14 sec
245	27 min 53 sec	29 min 36 sec

The other three moves (#167, #186, and #246) are linked to an end-of-train detection problem. CCTC analyzed them to establish a diagnosis. Their analysis indicated that the LICO station software updated the end-of-train indicator on an image already transferred to the CoRAIL stations in one specific case. This station therefore did not see the updated indicator and continued processing, which explains the problem. According to CCTC, possible solutions to this problem exist, and it would take approximately three days to correct it.

The obtained processing performance of 96.74% (89/92 moves) within 20 minutes conforms to the Port of Montreal's requirements. DTI believes that the changes made to the network configuration (hardware and software) of the CoRAIL stations allowed these requirements to be met. Some software recommendations made in Section 7 would allow further improvement of the performance currently achieved by the system.

5.2 Accuracy

The most important acceptance criterion for the AEI/OCR system is the level of accuracy obtained by the OCR program in the identification of container numbers. The OCR system is required to achieve an overall performance of 80% recognition accuracy of standard ISO container identification numbers.

The accuracy of the information transmitted via an EDI train consist file to the Port of Montreal corresponds exactly to the ability of the OCR program to determine the identification code marked on the container. The level of accuracy was achieved despite the following difficulties associated with reading these codes:

Nonconformance with the ISO 6346 container identification standard;
Shadow effects due to the physical corrugations on the containers;
Nature of the platforms used to transport the containers;
Underexposure or overexposure of the captured images;
Physical condition (e.g., rusted containers);
Weather conditions;
Different shades and/or colors used on the containers.

In the accuracy calculation DTI took into account all validity criteria described in Section 3. Two different percentages appear in Tables 12 to 14: one for all containers and another for "valid" containers. The accuracy obtained for each side or camera also appears. This calculation was greatly influenced by one or many of the difficulties listed above and problems occurring with the grabber software. The calculated accuracy per side represents an additional analysis to determine the feasibility of achieving an acceptable level of accuracy with a single camera per side rather than a dual camera mode. Note that the accuracy of the system would suffer greatly because redundancy would be lost.

Difficulties concerning results shown

As described in the previous sections, several problems persisted throughout the test period:

- adjustment
  - camera no 1
  - lights
  - train detection

- synchronization
  - between both LICO stations
  - between LICO station and AEI station

- end-of-train detection

- poor performance of the grabber for almost all the trains

- electric circuits
  - Solid State Relays
  - breakers

- stability of fixation systems used (cameras, housing, lights)

When all system components, including hardware and software, work perfectly, optimal conditions are reached. As these must be present to calculate true OCR accuracy, no test move can be considered as meeting these conditions. In DTI's analysis of results all moves suffered from one form of malfunction or another. It would be an error to make a critical judgment on the accuracy level obtained, based on the statistics in the following pages.

The results in Tables 12 to 14 help to answer certain questions raised by INO or CCTC during the first acceptance tests. However no conclusion can be made on the real accuracy of the OCR system, because problems in the AEI section significantly lowered its accuracy. So the results do not do it justice. For example, in moves #151 and #220 these problems decreased the OCR accuracy obtained by one of the two cameras, thereby falsifying the obtained results and the calculation of the global accuracy of the system. Thus analysis of the accuracy calculated and presented in each of the following tables must take into account these problems.

Nevertheless, the results obtained are very encouraging. On August 31st, following adjustments made by CCTC, the material/software conditions were the best observed during the two weeks of tests. As seen in Table 12, results obtained during this day were 85% OCR accuracy, despite problems with the frame grabber software.

Table 12 Accuracy rate – optimal conditions

DTI

Acceptance Tests Form - Optimal conditions (August 31th)

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf (%)	#Found	Invalid	Perf (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Avrg
2001-08-31	208	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	3	10	9
	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15

SUMMARY

Total # of trains analyzed :	2
Total # of containers :	151
Total # of valid containers :	141
Total # of code found CAM 1 :	85
Total # of code found CAM 2 :	85
Total # of code found PoM :	120
# of perfect match code :	54
% of perfect match code :	45.00%

INVALIDITY

Total # of invalid containers C	16
Total # of invalid containers C:	16
Total # of invalid containers :	10
Invalidity rate C1 :	10.60%
Invalidity rate C2 :	10.60%
Global invalidity rate :	6.62%

SPEED

Average min speed :	9
Average max. speed :	13
Average speed :	12

PoM	Mean Accuracy/all cont.	79.47%
	Mean Accuracy/valid cont.	85.11%
Cam 1	Mean Accuracy/all cont. C1	56.29%
	Mean Accuracy/valid cont. C1	62.96%
Cam 2	Mean Accuracy/all cont. C2	56.29%
	Mean Accuracy/valid cont. C2	62.96%

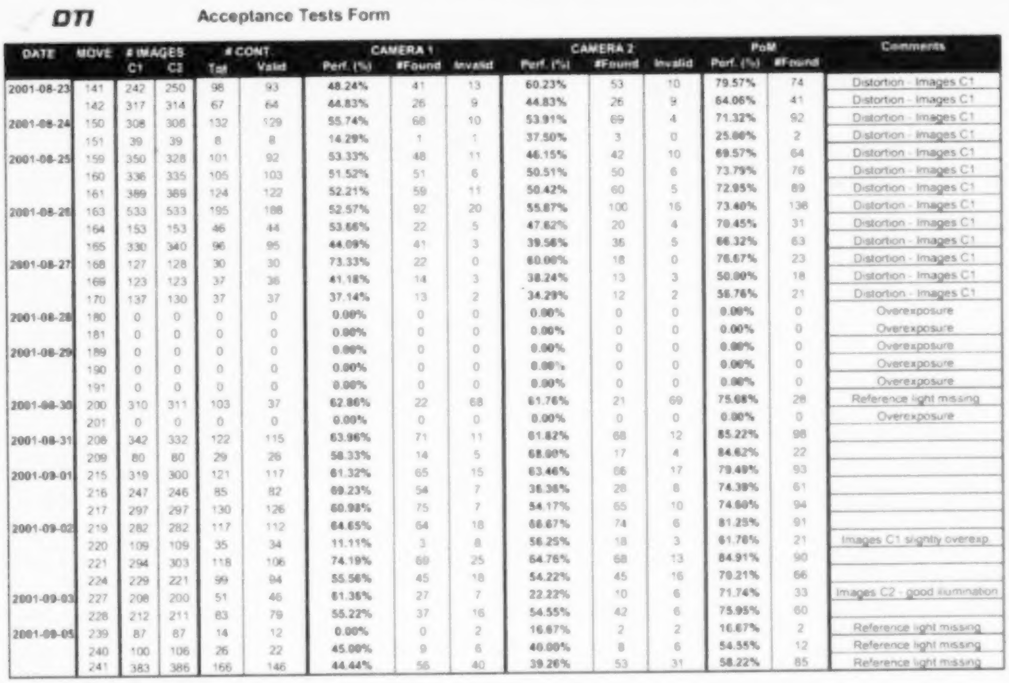
In conclusion, these two weeks of tests confirmed that, with optimal equipment and operating conditions as well as a functional AEI system, it would be possible to meet the 80% target of OCR accuracy. Thus, solutions to resolve the problems encountered during the acceptance tests must be found.

Tables of analysis of results

N.B. Tables 13 and 14 are presented for information only.

Table 13 presents the results obtained on 34 moves observed during the test period, as well as comments on the images collected for each move.

Table 13 Moves with containers



DTI Acceptance Tests Form

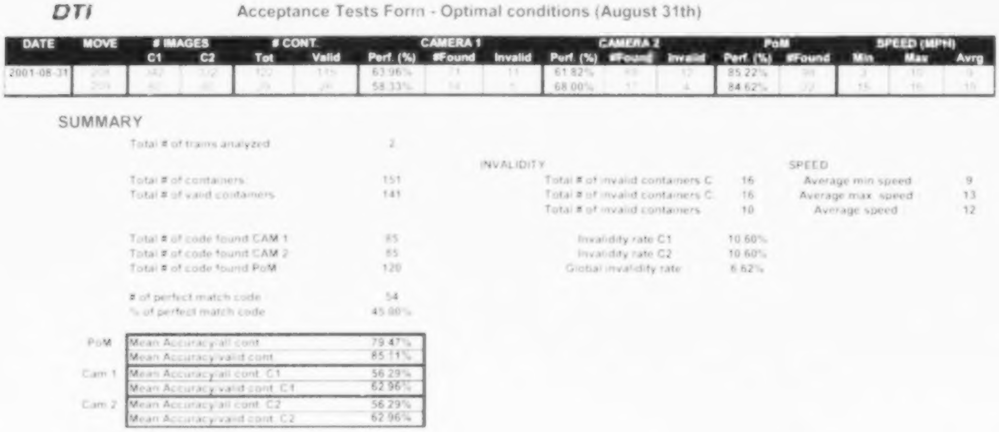
DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		Comments
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	
2001-08-23	141	242	250	98	93	48.24%	41	13	60.23%	53	10	79.57%	74	Distortion - Images C1
	142	317	314	67	64	44.83%	26	9	44.83%	26	9	64.06%	41	Distortion - Images C1
2001-08-24	150	308	306	132	129	55.74%	68	10	53.91%	69	4	71.32%	92	Distortion - Images C1
	151	39	39	8	8	14.29%	1	1	37.50%	3	0	25.00%	2	Distortion - Images C1
2001-08-25	159	350	328	101	92	53.33%	48	11	46.15%	42	10	69.57%	64	Distortion - Images C1
	160	336	335	105	103	51.52%	51	6	50.51%	50	6	73.79%	76	Distortion - Images C1
	161	389	389	124	122	52.21%	59	11	50.42%	60	5	72.95%	89	Distortion - Images C1
2001-08-2	163	533	533	195	188	52.57%	92	20	55.87%	100	16	73.40%	138	Distortion - Images C1
	164	153	153	46	44	53.66%	22	5	47.62%	20	4	70.45%	31	Distortion - Images C1
	165	330	340	96	95	44.09%	41	3	39.56%	36	5	66.32%	63	Distortion - Images C1
2001-08-27	168	127	128	30	30	73.33%	22	0	60.00%	18	0	76.67%	23	Distortion - Images C1
	169	123	123	37	36	41.18%	14	3	38.24%	13	3	50.00%	18	Distortion - Images C1
	170	137	130	37	37	37.14%	13	2	34.29%	12	2	56.76%	21	Distortion - Images C1
2001-08-2	180	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
	181	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
2001-08-2	189	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
	190	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
	191	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
2001-08-30	200	310	311	103	37	62.86%	22	68	61.76%	21	69	75.68%	28	Reference light missing
	201	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
2001-08-31	208	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	
	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	
2001-09-01	215	319	300	121	117	61.32%	65	15	63.46%	66	17	79.49%	93	
	216	247	246	85	82	69.23%	54	7	38.38%	28	8	74.39%	61	
	217	297	297	130	126	60.98%	75	7	54.17%	65	10	74.60%	94	
2001-09-02	219	282	282	117	112	64.65%	64	18	68.67%	74	6	81.25%	91	
	220	109	109	35	34	11.11%	3	8	58.25%	18	3	61.76%	21	Images C1 slightly overexp
	221	294	303	118	106	74.19%	69	25	64.76%	68	13	84.91%	90	
	224	229	221	99	94	55.56%	45	18	54.22%	45	16	70.21%	66	
2001-09-03	227	208	200	51	46	61.36%	27	7	22.22%	10	6	71.74%	33	Images C2 - good illumination
	228	212	211	83	79	55.22%	37	16	54.55%	42	6	75.95%	60	
2001-09-05	239	87	87	14	12	0.00%	0	2	16.67%	2	2	16.67%	2	Reference light missing
	240	100	106	26	22	45.00%	9	6	40.00%	8	6	54.55%	12	Reference light missing
	241	383	386	166	146	44.44%	56	40	39.26%	53	31	58.22%	85	Reference light missing

A sample of 24 of these moves was analyzed. Among the 34 moves that involved containers, seven (#180, 181, 189, 190, 191, 200, and 201) were rejected because of overexposure, which rendered the images unusable for analysis.

Three other moves (#239, 240, and 241) were also rejected because a reference light was not operational.

Table 14 presents the accuracy rate obtained on these 24 reserved moves.

Table 12 Accuracy rate – optimal conditions



DTI

Acceptance Tests Form - Optimal conditions (August 31th)

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Avrg
2001-08-31	208	342	372	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	3	10	9
	259	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15

SUMMARY

Total # of trains analyzed	2
Total # of containers	151
Total # of valid containers	141
Total # of code found CAM 1	85
Total # of code found CAM 2	85
Total # of code found PoM	120
# of perfect match code	54
% of perfect match code	45.00%

INVALIDITY

Total # of invalid containers C	16
Total # of invalid containers C	16
Total # of invalid containers	10
Invalidity rate C1	10.60%
Invalidity rate C2	10.60%
Global invalidity rate	6.62%

SPEED

Average min speed	9
Average max. speed	13
Average speed	12

PoM	Mean Accuracy/all cont.	79.47%
	Mean Accuracy/valid cont.	85.11%
Cam 1	Mean Accuracy/all cont. C1	56.29%
	Mean Accuracy/valid cont. C1	62.96%
Cam 2	Mean Accuracy/all cont. C2	56.29%
	Mean Accuracy/valid cont. C2	62.96%

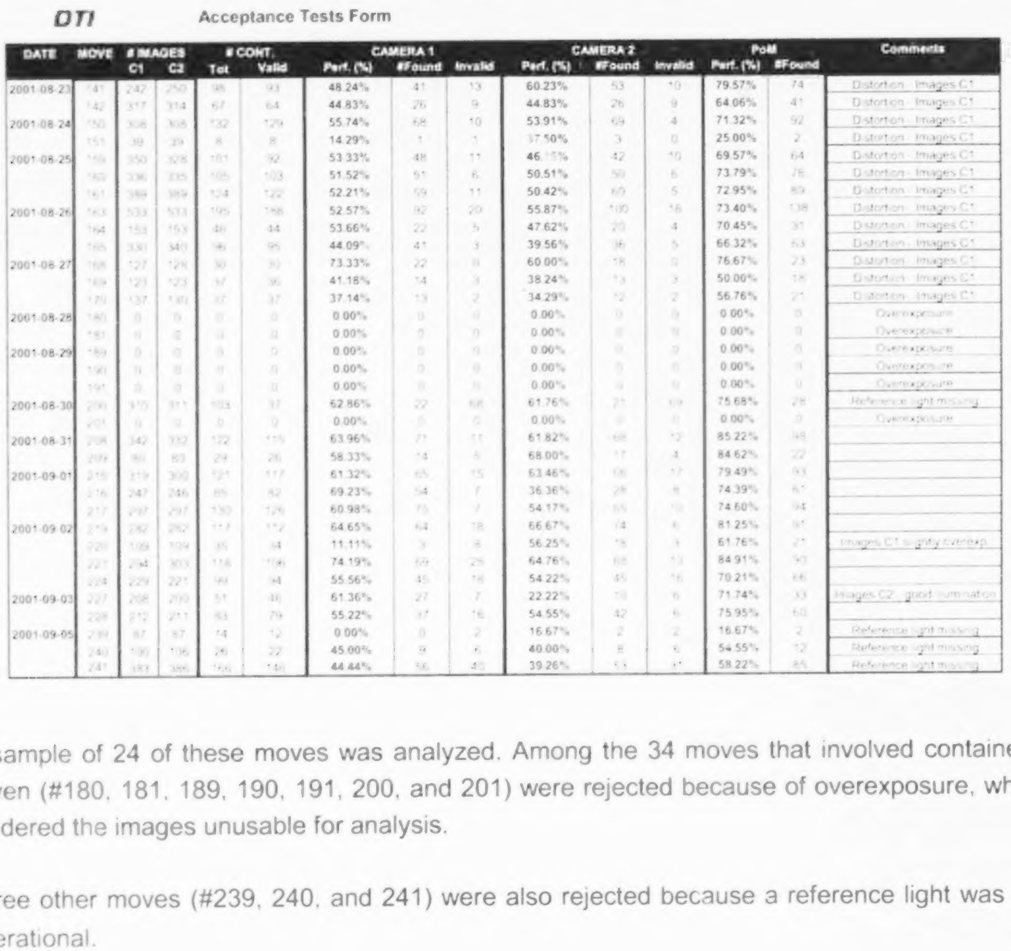
In conclusion, these two weeks of tests confirmed that, with optimal equipment and operating conditions as well as a functional AEI system, it would be possible to meet the 80% target of OCR accuracy. Thus, solutions to resolve the problems encountered during the acceptance tests must be found.

Tables of analysis of results

N.B. Tables 13 and 14 are presented for information only.

Table 13 presents the results obtained on 34 moves observed during the test period, as well as comments on the images collected for each move.

Table 13 Moves with containers



DTI Acceptance Tests Form

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		Comments
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	
2001-08-23	141	242	250	95	93	48.24%	41	13	60.23%	53	10	79.57%	74	Distortion - Images C1
	142	317	314	67	64	44.83%	26	9	44.83%	26	9	64.06%	41	Distortion - Images C1
2001-08-24	150	308	308	132	129	55.74%	68	10	53.91%	69	4	71.32%	92	Distortion - Images C1
	151	39	39	8	8	14.29%	1	1	37.50%	3	0	25.00%	2	Distortion - Images C1
2001-08-25	159	350	328	101	92	53.33%	48	11	46.15%	42	10	69.57%	64	Distortion - Images C1
	160	336	335	105	103	51.52%	51	6	50.51%	50	6	73.79%	76	Distortion - Images C1
	161	389	389	124	122	52.21%	59	11	50.42%	60	5	72.95%	89	Distortion - Images C1
2001-08-26	163	533	533	195	188	52.57%	92	20	55.87%	100	16	73.40%	138	Distortion - Images C1
	164	153	153	46	44	53.66%	22	5	47.62%	20	4	70.45%	31	Distortion - Images C1
	165	331	340	96	95	44.09%	41	3	39.56%	36	5	66.32%	63	Distortion - Images C1
2001-08-27	168	127	128	30	30	73.33%	22	0	60.00%	18	0	76.67%	23	Distortion - Images C1
	169	123	123	37	36	41.18%	14	3	38.24%	13	3	50.00%	18	Distortion - Images C1
	170	137	140	37	37	37.14%	13	2	34.29%	12	2	56.76%	21	Distortion - Images C1
2001-08-28	180	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
	181	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
2001-08-29	189	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
	190	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
	191	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
2001-08-30	200	310	311	103	37	62.86%	22	68	61.76%	21	69	75.68%	28	Reference light missing
	201	0	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	Overexposure
2001-08-31	208	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	
	209	90	83	29	26	58.33%	14	6	68.00%	17	4	84.62%	22	
2001-09-01	215	319	300	121	117	61.32%	65	15	63.46%	66	17	79.49%	93	
	216	247	246	85	82	69.23%	54	7	36.36%	28	8	74.39%	61	
	217	297	297	130	126	60.98%	75	7	54.17%	65	10	74.60%	94	
2001-09-02	219	282	282	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	
	220	109	109	35	34	11.11%	3	8	56.25%	18	3	61.76%	21	Images C1 slightly overexp.
	221	294	303	118	106	74.19%	69	25	64.76%	68	13	84.91%	90	
	224	229	221	99	94	55.56%	45	18	54.22%	45	16	70.21%	66	
2001-09-03	227	208	209	51	46	61.36%	27	7	22.22%	10	6	71.74%	33	Images C2 : good illumination
	228	212	211	83	79	55.22%	37	16	54.55%	42	6	75.95%	60	
2001-09-05	239	87	87	14	12	0.00%	0	2	16.67%	2	2	16.67%	2	Reference light missing
	240	100	106	26	22	45.00%	9	6	40.00%	8	6	54.55%	12	Reference light missing
	241	383	386	166	149	44.44%	56	40	39.26%	53	41	58.22%	85	Reference light missing

A sample of 24 of these moves was analyzed. Among the 34 moves that involved containers, seven (#180, 181, 189, 190, 191, 200, and 201) were rejected because of overexposure, which rendered the images unusable for analysis.

Three other moves (#239, 240, and 241) were also rejected because a reference light was not operational.

Table 14 presents the accuracy rate obtained on these 24 reserved moves.

Table 14 Accuracy rate on reserved moves

DTI Acceptance Tests Form

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-23	141	242	250	98	93	48.21%	41	13	60.23%	53	10	79.57%	74	9	10	9
	142	317	314	67	64	44.83%	26	9	44.83%	26	9	64.06%	41	8	14	11
2001-08-24	150	308	308	132	129	55.74%	68	10	53.91%	69	4	71.32%	92	5	10	9
	151	39	39	8	8	14.29%	1	1	37.50%	3	0	25.00%	2	14	18	16
2001-08-25	159	[illegible]	328	101	92	53.33%	48	11	46.15%	42	10	69.57%	64	12	19	16
	160	336	335	105	103	51.52%	51	6	50.51%	50	6	73.79%	76	1	9	8
	161	389	389	124	122	52.21%	59	11	50.42%	60	5	72.95%	89	6	14	11
2001-08-26	163	531	533	195	188	52.57%	92	20	55.87%	100	16	73.40%	138	4	12	8
	164	151	151	46	44	53.66%	22	5	47.62%	20	4	70.45%	31	11	14	13
	165	330	340	96	95	44.09%	41	3	39.56%	36	5	66.32%	63	12	16	14
2001-08-27	168	127	128	30	30	73.33%	22	0	60.00%	18	0	76.67%	23	8	9	9
	169	123	121	37	36	41.18%	14	3	38.24%	13	3	50.00%	18	3	9	7
	170	137	130	37	37	37.14%	13	2	34.29%	12	2	56.76%	21	3	13	10
2001-08-31	208	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	3	10	9
	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15
2001-09-01	215	319	300	121	117	61.32%	65	15	63.46%	66	17	79.49%	93	8	11	10
	216	247	246	85	82	69.23%	54	7	36.36%	28	8	74.39%	61	10	12	12
	217	297	297	130	126	60.98%	75	7	54.17%	65	10	74.60%	94	10	14	12
2001-09-02	219	282	282	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	10	10	10
	220	109	109	35	34	11.11%	3	8	56.25%	18	3	61.76%	21	10	10	10
	221	294	303	118	106	74.19%	69	25	64.76%	68	13	84.91%	90	8	10	10
	224	229	221	99	94	55.56%	45	18	54.22%	45	16	70.21%	66	9	10	10
2001-09-03	227	208	200	51	46	61.36%	27	7	22.22%	10	6	71.74%	33	10	10	10
	228	212	211	83	79	55.22%	37	16	54.55%	42	6	75.95%	60	4	10	9

SUMMARY

Total # of trains analyzed :	28
Total # of containers :	2066
Total # of valid containers :	1978
Total # of code found CAM 1:	1022
Total # of code found CAM 2:	1003
Total # of code found PoM:	1461
# of perfect match code :	639
% of perfect match code :	43.74%

INVALIDITY

Total # of invalid containers C1 :	231
Total # of invalid containers C2 :	175
Total # of invalid containers :	88
Invalidity rate C1 :	11.18%
Invalidity rate C2 :	8.47%
Global invalidity rate :	4.26%

SPEED

Average min speed :	8
Average max. speed :	12.3
Average speed :	10.8

PoM	Mean Accuracy/all cont.	70.72%
	Mean Accuracy/valid cont.	73.86%
Cam 1	Mean Accuracy/all cont. C1	49.47%
	Mean Accuracy/valid cont. C1	55.69%
Cam 2	Mean Accuracy/all cont. C2	48.55%
	Mean Accuracy/valid cont. C2	53.04%

Table 14 Accuracy rate on reserved moves

DTI Acceptance Tests Form

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-23	141	242	250	96	93	48.24%	41	13	60.23%	53	10	79.57%	74	9	10	9
	142	317	314	67	64	44.83%	26	9	44.83%	26	9	64.06%	41	6	14	11
2001-08-24	150	308	308	132	129	55.74%	68	10	53.91%	69	4	71.32%	92	5	10	9
	151	39	39	8	8	14.29%	1	1	37.50%	3	0	25.00%	2	14	18	16
2001-08-25	159	350	328	101	92	53.33%	48	11	46.15%	42	10	69.57%	64	12	19	16
	160	336	335	105	103	51.52%	51	6	50.51%	50	6	73.79%	76	1	9	8
	161	389	389	124	122	52.21%	59	11	50.42%	60	5	72.95%	89	6	14	11
2001-08-26	163	533	533	195	188	52.57%	92	20	55.87%	100	16	73.40%	138	4	12	8
	164	153	153	46	44	53.66%	22	5	47.62%	20	4	70.45%	31	11	14	13
	165	330	340	96	95	44.09%	41	3	39.56%	36	5	66.32%	63	12	16	14
2001-08-27	168	127	128	30	30	73.33%	22	0	60.00%	18	0	76.67%	23	8	9	9
	169	123	123	37	36	41.18%	14	3	38.24%	13	3	50.00%	18	3	9	7
	170	137	130	37	37	37.14%	13	2	34.29%	12	2	56.76%	21	3	13	10
2001-08-31	208	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	3	10	9
	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15
2001-09-01	215	319	300	121	117	61.32%	65	15	63.46%	66	17	79.49%	93	8	11	10
	216	247	246	85	82	69.23%	54	7	36.36%	28	8	74.39%	61	10	12	12
	217	297	297	130	126	60.98%	75	7	54.17%	65	10	74.60%	94	10	14	12
2001-09-02	219	282	282	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	10	10	10
	220	109	109	35	34	11.11%	3	8	56.25%	18	3	61.76%	21	10	10	10
	221	294	303	118	106	74.19%	69	25	64.76%	68	13	84.91%	90	8	10	10
	224	229	221	99	94	55.56%	45	18	54.22%	45	16	70.21%	66	9	10	10
2001-09-03	227	208	200	51	46	61.36%	27	7	22.22%	10	6	71.74%	33	10	10	10
	228	212	211	83	79	55.22%	37	16	54.55%	42	6	75.95%	60	4	10	9

SUMMARY

Total # of trains analyzed :	28
Total # of containers:	2066
Total # of valid containers :	1978
Total # of code found CAM 1:	1022
Total # of code found CAM 2:	1003
Total # of code found PoM:	1461
# of perfect match code :	639
% of perfect match code :	43.74%

INVALIDITY

Total # of invalid containers C1 :	231
Total # of invalid containers C2 :	175
Total # of invalid containers :	88
Invalidity rate C1 :	11.18%
Invalidity rate C2 :	8.47%
Global invalidity rate :	4.26%

SPEED

Average min.speed :	8
Average max. speed :	12.3
Average speed :	10.8

PoM	Mean Accuracy/all cont.	70.72%
	Mean Accuracy/valid cont.	73.86%
Cam 1	Mean Accuracy/all cont. C1	49.47%
	Mean Accuracy/valid cont. C1	55.69%
Cam 2	Mean Accuracy/all cont. C2	48.55%
	Mean Accuracy/valid cont. C2	53.04%

On the basis of these compiled results, DTI made the following interpretations:

The overall accuracy for all containers observed: 70.7% (73.9% of those identified as "valid") → the specified accuracy threshold was not achieved during the tests.

Accuracy obtained on camera 1: 49.5% (55.7% for the "valid" containers). Accuracy obtained on camera 2: 48.6% (53% for the "valid" containers) → the accuracy of each camera is essentially the same.

The percentage of completely invalid containers is 4.3% (11.2% for side of camera 1, 8.5% for side of camera 2) → the percentage of invalid containers slightly reduces the accuracy rate obtained.

Perfect identification of the containers by the two cameras was obtained for 28.8% of all containers observed during the test period. Moreover, 40.7% of the identification codes transmitted to the Port of Montreal computer were identified by both cameras, while the other codes returned were the result of interpretation by the INO software of the combination of the two images returned by the cameras.

5.3 Other Observations

DTI made some supplementary analyses of these 24 moves, to clear up certain points and to confirm or to weaken certain conclusions of the INO test report.

Day/Night Accuracy

One of the points raised by INO and CCTC during the first test series was that the accuracy of the results was better at night than by day. They noted the presence of a building opposite camera 2, contrary to camera 1, which is aimed at the pier and the sky. Since the building acts as a background, this works to the advantage of camera 2 in terms of image capture quality. In addition, shadows play on the site because of the nearby grain elevators.

Figures 5 and 6 show the physical location of the target lights serving as references for the two cameras and the background of each camera. The photos were taken in the early afternoon on October 15th, 2001. On a sunny morning, the site is completely in sunlight, but by early afternoon the site becomes increasingly shaded until it is completely in the shade at sunset.

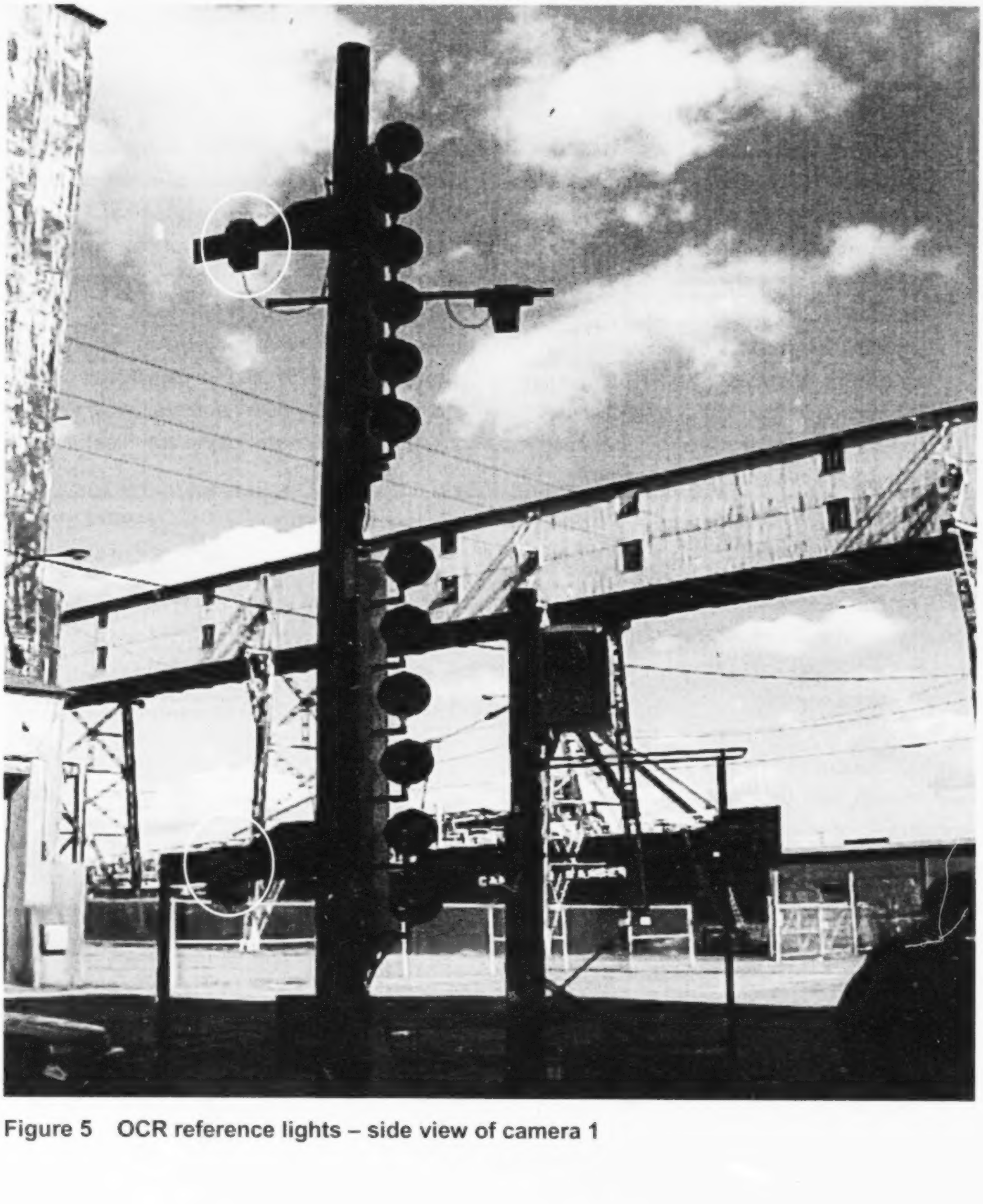


Figure 5 OCR reference lights – side view of camera 1

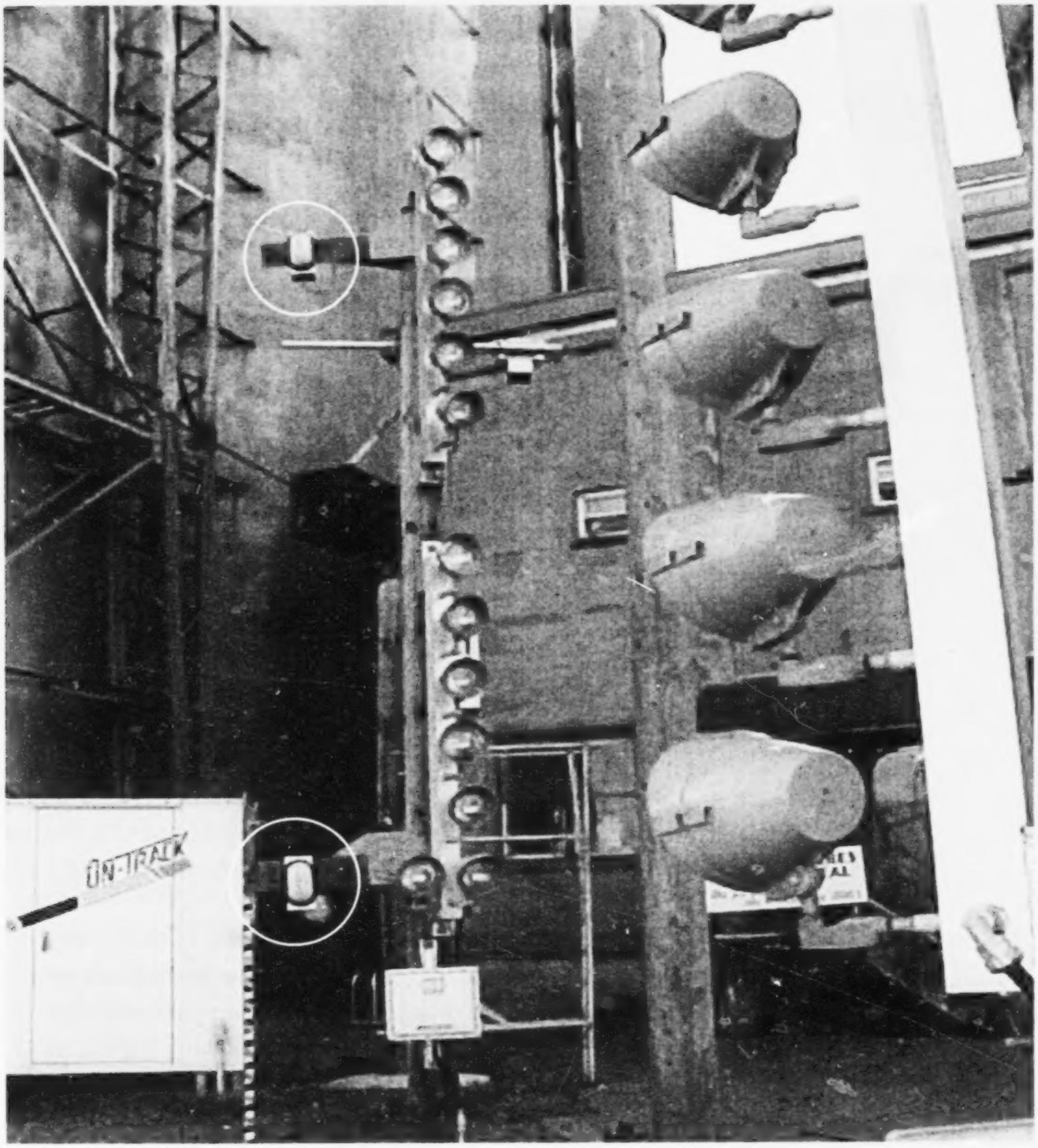
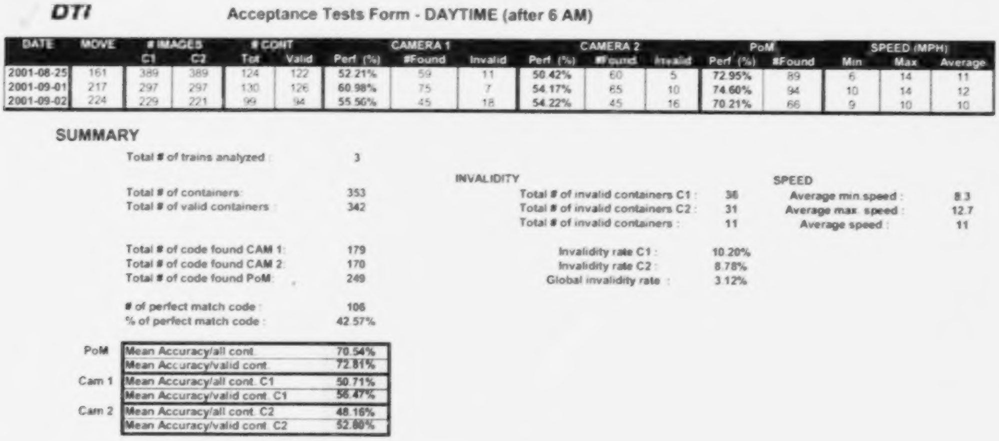


Figure 6 **OCR reference lights – side view of camera 2**

The basis of selection of the moves for Tables 15 and 16 is:

Daytime: from 6:00 a.m. to 8:00 p.m.
Nighttime: from 8:00 p.m. to 6:00 a.m.

Table 15 Daytime accuracy rate



DTI

Acceptance Tests Form - DAYTIME (after 6 AM)

DATE	MOVE	# IMAGES		# CONT		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf (%)	#Found	Invalid	Perf (%)	#Found	Invalid	Perf (%)	#Found	Min	Max	Average
2001-08-25	161	389	389	124	122	52.21%	59	11	50.42%	60	5	72.95%	89	6	14	11
2001-09-01	217	297	297	130	126	60.98%	75	7	54.17%	65	10	74.60%	94	10	14	12
2001-09-02	224	229	221	99	94	55.56%	45	18	54.22%	45	16	70.21%	66	9	10	10

SUMMARY

Total # of trains analyzed :	3
Total # of containers:	353
Total # of valid containers :	342
Total # of code found CAM 1:	179
Total # of code found CAM 2:	170
Total # of code found PoM:	249
# of perfect match code :	106
% of perfect match code :	42.57%

INVALIDITY

Total # of invalid containers C1 :	36
Total # of invalid containers C2 :	31
Total # of invalid containers :	11
Invalidity rate C1 :	10.20%
Invalidity rate C2 :	8.78%
Global invalidity rate :	3.12%

SPEED

Average min.speed :	8.3
Average max. speed :	12.7
Average speed :	11

PoM	Mean Accuracy/all cont.	70.54%
	Mean Accuracy/valid cont.	72.81%
Cam 1	Mean Accuracy/all cont. C1	50.71%
	Mean Accuracy/valid cont. C1	56.47%
Cam 2	Mean Accuracy/all cont. C2	48.16%
	Mean Accuracy/valid cont. C2	52.80%

Table 16 Nighttime accuracy rate

DTI

Acceptance Tests Form - NIGHTTIME (after 8 PM)

DATE	MOVE	# IMAGES		# CONT		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-23	141	242	250	98	93	48.24%	41	13	60.23%	53	10	79.57%	74	9	10	9
	142	317	314	67	64	44.83%	26	9	44.83%	26	9	64.06%	41	6	14	11
2001-08-24	150	308	308	132	129	55.74%	68	10	53.91%	69	4	71.32%	92	5	10	9
	151	39	39	8	8	14.29%	1	1	37.50%	3	0	25.00%	2	14	18	16
2001-08-25	159	350	328	101	92	53.33%	48	11	46.15%	42	10	69.57%	64	12	19	16
	160	336	335	105	103	51.52%	51	6	50.51%	50	6	73.79%	76	1	9	8
2001-08-26	163	533	533	195	188	52.57%	92	20	55.87%	100	16	73.40%	138	4	12	8
	164	153	153	46	44	53.66%	22	5	47.62%	20	4	70.45%	31	11	14	13
	165	330	340	96	95	44.09%	41	3	39.56%	36	5	66.32%	63	12	16	14
2001-08-27	168	127	128	30	30	73.33%	22	0	60.00%	18	0	76.67%	23	8	9	9
	169	123	123	37	36	41.18%	14	3	38.24%	13	3	50.00%	18	3	9	7
	170	137	130	37	37	37.14%	13	2	34.29%	12	2	56.76%	21	3	13	10
2001-08-31	208	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	3	10	9
	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15
2001-09-01	215	319	300	121	117	61.32%	65	15	63.46%	66	17	79.49%	93	8	11	10
	216	247	246	85	82	69.23%	54	7	36.36%	28	8	74.39%	61	10	12	12
2001-09-02	219	282	282	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	10	10	10
	220	109	109	35	34	11.11%	3	8	56.25%	18	3	61.76%	21	10	10	10
	221	294	303	118	106	74.19%	69	25	64.78%	68	13	84.91%	90	8	10	10
2001-09-03	227	208	200	51	46	61.36%	27	7	22.22%	10	6	71.74%	33	10	10	10
	228	212	211	83	79	55.22%	37	16	54.55%	42	6	75.95%	60	4	10	9

SUMMARY

Total # of trains analyzed :	25
Total # of containers:	1713
Total # of valid containers :	1636
Total # of code found CAM 1 :	843
Total # of code found CAM 2 :	833
Total # of code found PoM	1212
# of perfect match code :	533
% of perfect match code :	43.98%

INVALIDITY

Total # of invalid containers C1 :	195
Total # of invalid containers C2 :	144
Total # of invalid containers :	77
Invalidity rate C1 :	11.38%
Invalidity rate C2 :	8.41%
Global invalidity rate :	4.50%

SPEED

Average min speed :	7.904762
Average max. speed :	12
Average speed :	10.7

PoM	Mean Accuracy/all cont.	70.75%
	Mean Accuracy/valid cont.	74.08%
Cam 1	Mean Accuracy/all cont. C1	49.21%
	Mean Accuracy/valid cont. C1	55.53%
Cam 2	Mean Accuracy/all cont. C2	48.63%
	Mean Accuracy/valid cont. C2	53.09%

As INO observed the first time, there are many more nighttime activities. During the present tests, the Mosaïcultures exhibition certainly had an effect on this, with only three moves out of 24. After analyzing these figures, DTI formulated the following interpretations:

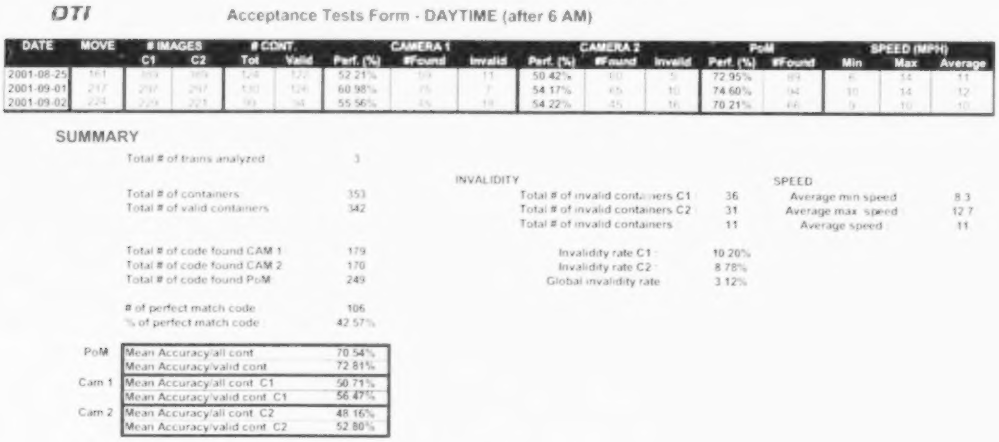
> The container invalidity rate is greater at night than by day (about 4.5%). However, due to the low daytime sample, it is very difficult to arrive at a valid conclusion.
>
> The percentage of accuracy for the "valid" containers is practically the same by day (70.5%) as at night (70.8%).
>
> The percentage of accuracy for the "valid" containers is essentially the same for each camera: camera 1 gives 56.5% by day vs. 55.5% at night, while camera 2 gives 52.8% by day vs. 53.1% at night.

Clearly, time of day has very little impact on the results obtained. The same finding can also be applied to the presence of Elevator 5 and the play of shadows on the site.

The basis of selection of the moves for Tables 15 and 16 is:

Daytime: from 6:00 a.m. to 8:00 p.m.
Nighttime: from 8:00 p.m. to 6:00 a.m.

Table 15 Daytime accuracy rate



OTI

Acceptance Tests Form - DAYTIME (after 6 AM)

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-25	161	369	369	124	122	52.21%	59	11	50.42%	60	5	72.95%	89	6	14	11
2001-09-01	217	297	297	130	126	60.98%	75	7	54.17%	65	10	74.60%	94	10	14	12
2001-09-02	224	229	221	99	94	55.56%	45	18	54.22%	45	16	70.21%	66	9	10	10

SUMMARY

Total # of trains analyzed:	3
Total # of containers:	353
Total # of valid containers:	342
Total # of code found CAM 1:	179
Total # of code found CAM 2:	170
Total # of code found PoM:	249
# of perfect match code:	106
% of perfect match code:	42.57%

INVALIDITY

Total # of invalid containers C1:	36
Total # of invalid containers C2:	31
Total # of invalid containers:	11
Invalidity rate C1:	10.20%
Invalidity rate C2:	8.78%
Global invalidity rate:	3.12%

SPEED

Average min speed:	8.3
Average max speed:	12.7
Average speed:	11

PoM	Mean Accuracy/all cont	70.54%
	Mean Accuracy/valid cont	72.81%
Cam 1	Mean Accuracy/all cont C1	50.71%
	Mean Accuracy/valid cont C1	56.47%
Cam 2	Mean Accuracy/all cont C2	48.16%
	Mean Accuracy/valid cont C2	52.80%

Table 16 Nighttime accuracy rate

DTI Acceptance Tests Form - NIGHTTIME (after 8 PM)

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-23	141	242	250	98	93	48.24%	41	13	60.23%	53	10	79.57%	74	9	10	9
	142	117	114	67	64	44.83%	26	9	44.83%	26	9	64.06%	41	6	14	11
2001-08-24	150	308	305	132	129	55.74%	68	10	53.91%	69	4	71.32%	92	5	10	9
	151	19	19	8	8	14.29%	1	1	37.50%	3	0	25.00%	2	14	18	16
2001-08-25	159	350	324	101	92	53.33%	48	11	46.15%	42	10	69.57%	64	12	19	16
	160	336	335	105	103	51.52%	51	6	50.51%	50	6	73.79%	76	1	9	6
2001-08-26	163	511	513	195	188	52.57%	92	20	55.87%	100	16	73.40%	138	4	12	8
	164	151	163	46	44	53.66%	22	5	47.62%	20	4	70.45%	31	11	14	13
	165	130	145	96	95	44.09%	41	3	39.56%	36	5	66.32%	63	12	16	14
2001-08-27	168	127	128	30	30	73.33%	22	0	60.00%	18	0	76.67%	23	8	9	9
	169	123	121	37	36	41.18%	14	3	38.24%	13	3	50.00%	18	3	9	7
	170	117	110	37	37	37.14%	13	2	34.29%	12	2	56.76%	21	3	13	10
2001-08-31	208	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	8	10	9
	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15
2001-09-01	215	319	300	121	117	61.32%	65	15	63.46%	66	17	79.49%	93	8	11	10
	216	247	246	85	82	69.23%	54	7	36.36%	28	8	74.39%	61	10	12	12
2001-09-02	219	292	292	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	10	10	10
	220	106	109	35	34	11.11%	3	8	56.25%	18	3	61.76%	21	10	10	10
	221	294	303	118	106	74.19%	69	25	64.76%	68	13	84.91%	90	8	10	10
2001-09-03	227	208	200	51	46	61.36%	27	7	22.22%	10	6	71.74%	33	10	10	10
	228	212	211	83	79	55.22%	37	16	54.55%	42	6	75.95%	60	2	10	4

SUMMARY

Total # of trains analyzed	25
Total # of containers	1713
Total # of valid containers	1636
Total # of code found CAM 1	843
Total # of code found CAM 2	833
Total # of code found PoM	1212
# of perfect match code	533
% of perfect match code	43.98%

INVALIDITY

Total # of invalid containers C1	195
Total # of invalid containers C2	144
Total # of invalid containers	77
Invalidity rate C1	11.38%
Invalidity rate C2	8.41%
Global invalidity rate	4.50%

SPEED

Average min speed	7.904762
Average max speed	12
Average speed	10.7

PoM	Mean Accuracy/all cont	70.75%
	Mean Accuracy/valid cont	74.08%
Cam 1	Mean Accuracy/all cont C1	49.21%
	Mean Accuracy/valid cont C1	55.53%
Cam 2	Mean Accuracy/all cont C2	48.63%
	Mean Accuracy/valid cont C2	53.09%

As INO observed the first time, there are many more nighttime activities. During the present tests, the Mosaïcultures exhibition certainly had an effect on this, with only three moves out of 24. After analyzing these figures, DTI formulated the following interpretations:

The container invalidity rate is greater at night than by day (about 4.5%). However, due to the low daytime sample, it is very difficult to arrive at a valid conclusion.

The percentage of accuracy for the "valid" containers is practically the same by day (70.5%) as at night (70.8%).

The percentage of accuracy for the "valid" containers is essentially the same for each camera: camera 1 gives 56.5% by day vs. 55.5% at night, while camera 2 gives 52.8% by day vs. 53.1% at night.

Clearly, time of day has very little impact on the results obtained. The same finding can also be applied to the presence of Elevator 5 and the play of shadows on the site.

Accuracy following adjustments to camera 1

DTI also evaluated the impact of the August 30 adjustments to camera 1 on the results obtained. Following these adjustments, the physical configuration of the equipment was optimal. Table 17 presents the results obtained following these adjustments.

Table 17 Accuracy rate after adjustment of camera 1

DTI **Acceptance Tests Form - After 2001-08-30**

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-31	208	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	3	10	9
	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15
2001-09-01	215	319	300	121	117	61.32%	65	15	63.46%	66	17	79.49%	93	8	11	10
	216	247	246	85	82	69.23%	54	7	36.36%	28	8	74.39%	61	10	12	12
	217	297	297	130	126	60.98%	75	7	54.17%	65	10	74.60%	94	10	14	12
2001-09-02	219	282	282	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	10	10	10
	220	109	109	35	34	11.11%	3	8	56.25%	18	3	61.76%	21	10	10	10
	221	294	303	118	106	74.19%	69	25	64.76%	68	13	84.91%	90	8	10	10
	224	229	221	99	94	55.56%	45	18	54.22%	45	16	70.21%	66	9	10	10
2001-09-03	227	208	200	51	46	61.36%	27	7	22.22%	10	6	71.74%	33	10	10	10
	228	212	211	83	79	55.22%	37	16	54.55%	42	6	75.95%	60	4	10	9

SUMMARY

Total # of trains analyzed :	28
Total # of containers:	990
Total # of valid containers :	937
Total # of code found CAM 1:	524
Total # of code found CAM 2:	501
Total # of code found PoM:	729
# of perfect match code :	639
% of perfect match code :	87.65%

INVALIDITY

Total # of invalid containers C1 :	137
Total # of invalid containers C2 :	101
Total # of invalid containers :	53
Invalidity rate C1 :	13.84%
Invalidity rate C2 :	10.20%
Global invalidity rate :	5.35%

SPEED

Average min speed :	8
Average max. speed :	12.3
Average speed :	10.8

PoM	Mean Accuracy/all cont.	73.64%
	Mean Accuracy/valid cont.	77.80%
Cam 1	Mean Accuracy/all cont. C1	52.93%
	Mean Accuracy/valid cont. C1	61.43%
Cam 2	Mean Accuracy/all cont. C2	50.61%
	Mean Accuracy/valid cont. C2	56.36%

By comparing these results (11 train moves) with those obtained for the test period as a whole, DTI deduces that:

The camera adjustment had a major impact on the results: the overall accuracy for all containers observed is greater (73.6% vs. 70.7%), as is the overall accuracy for the "valid" containers (77.8% vs. 73.9%) → The target threshold of 80% is nearly achieved when conditions are optimal.

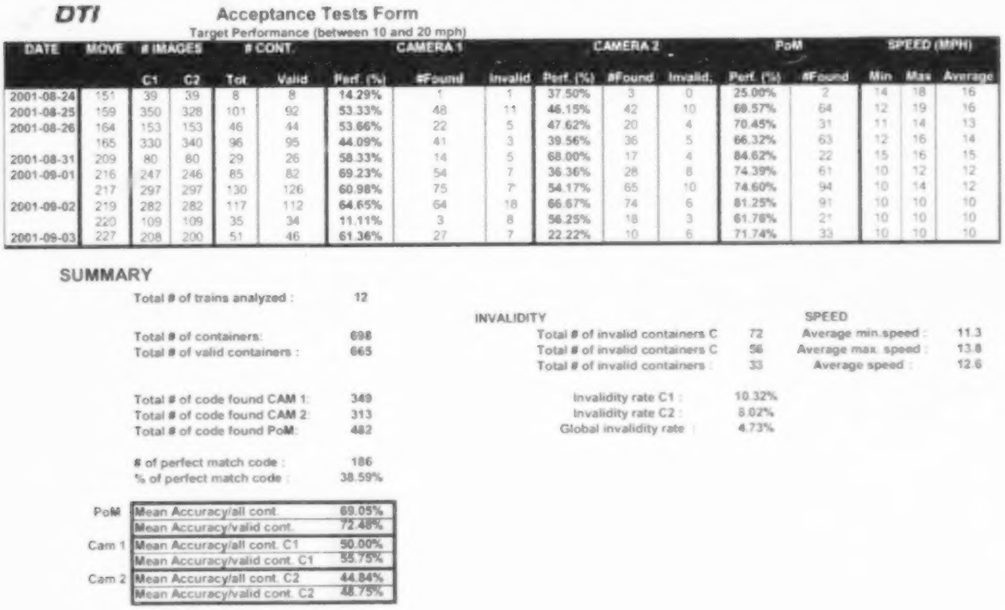
The accuracy obtained on the two cameras for all containers follows the same trend: a slight increase for both camera 1 (52.9% vs. 49.5%) and camera 2 (50.6% vs. 48.6%).

DTI concludes that the adjustment had an important impact on the results obtained during the test period. It confirms that the OCR accuracy obtained by the system depends largely on the state of the site's physical configuration.

Accuracy – target speed interval between 10 and 20 MPH

Table 18 presents the results obtained when trains travel within the speed determined in the Port of Montreal's acceptance criteria, namely 15 mph 5. Among the trains observed during the period, only 10 of 24 conformed to this speed criterion.

Table 18 Accuracy rate – speed moves between 10 and 20 mph



DTI

Acceptance Tests Form

Target Performance (between 10 and 20 mph)

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-24	151	39	39	8	8	14.29%	1	1	37.50%	3	0	25.00%	2	14	18	16
2001-08-25	159	350	328	101	92	53.33%	48	11	46.15%	42	10	69.57%	64	12	19	16
2001-08-26	164	153	153	46	44	53.66%	22	5	47.62%	20	4	70.45%	31	11	14	13
	165	330	340	96	95	44.09%	41	3	39.56%	36	5	66.32%	63	12	16	14
2001-08-31	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15
2001-09-01	216	247	246	85	82	69.23%	54	7	36.36%	28	8	74.39%	61	10	12	12
	217	297	297	130	126	60.98%	75	7	54.17%	65	10	74.60%	94	10	14	12
2001-09-02	219	282	282	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	10	10	10
	220	109	109	35	34	11.11%	3	8	56.25%	18	3	61.76%	21	10	10	10
2001-09-03	227	208	200	51	46	61.36%	27	7	22.22%	10	6	71.74%	33	10	10	10

SUMMARY

Total # of trains analyzed :	12
Total # of containers:	698
Total # of valid containers :	665
Total # of code found CAM 1:	349
Total # of code found CAM 2:	313
Total # of code found PoM:	482
# of perfect match code :	186
% of perfect match code :	38.59%

INVALIDITY

Total # of invalid containers C	72
Total # of invalid containers C	56
Total # of invalid containers :	33
Invalidity rate C1 :	10.32%
Invalidity rate C2 :	8.02%
Global invalidity rate :	4.73%

SPEED

Average min.speed :	11.3
Average max. speed :	13.8
Average speed :	12.6

PoM	Mean Accuracy/all cont.	69.05%
	Mean Accuracy/valid cont.	72.48%
Cam 1	Mean Accuracy/all cont. C1	50.00%
	Mean Accuracy/valid cont. C1	55.75%
Cam 2	Mean Accuracy/all cont. C2	44.84%
	Mean Accuracy/valid cont. C2	48.75%

Despite this, the accuracy obtained is similar to the rate obtained overall (69.1% vs. 70.7%, 72.5% vs. 73.9% for the "valid" containers). Analysis of the results led to the following interpretations:

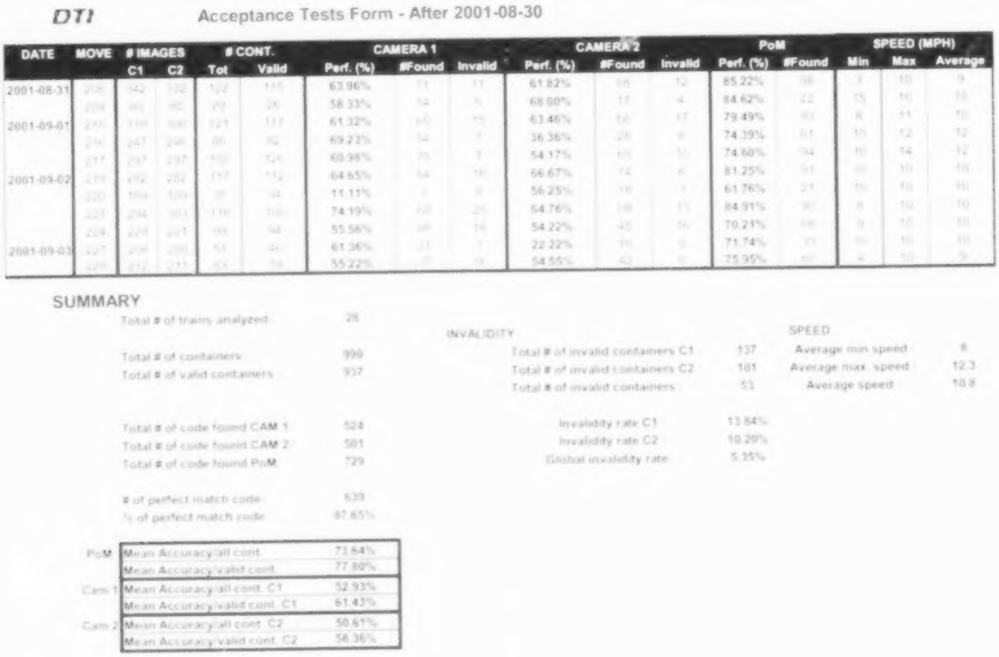
The camera accuracy rates are essentially the same (50% vs. 49.5% for camera 1; 44.8% vs. 48.6% for camera 2).

Since the accuracy rate obtained is between 25% and 84.6%, the constant speed of a move cannot guarantee better results (only 2 out of 10 moves achieved the 80% threshold).

Accuracy following adjustments to camera 1

DTI also evaluated the impact of the August 30 adjustments to camera 1 on the results obtained. Following these adjustments, the physical configuration of the equipment was optimal. Table 17 presents the results obtained following these adjustments.

Table 17 Accuracy rate after adjustment of camera 1



DTI Acceptance Tests Form - After 2001-08-30

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-31	206	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	3	10	9
	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15
2001-09-01	215	318	300	121	117	61.32%	65	15	63.46%	66	17	79.49%	93	8	11	10
	216	247	298	85	82	69.23%	54	7	36.36%	28	8	74.39%	61	10	12	12
	217	297	297	130	126	60.98%	75	7	54.17%	65	10	74.60%	94	10	14	12
2001-09-02	219	282	282	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	10	10	10
	220	109	109	35	34	11.11%	3	8	56.25%	18	3	61.76%	21	10	10	10
	221	294	303	118	106	74.19%	69	25	64.76%	68	13	84.91%	90	8	10	10
	224	229	221	99	94	55.56%	45	18	54.22%	45	16	70.21%	66	9	10	10
2001-09-03	227	208	200	51	46	61.36%	27	7	22.22%	10	6	71.74%	33	10	10	10
	228	212	211	95	79	55.22%	37	28	54.55%	42	18	75.95%	60	4	10	9

SUMMARY

Total # of trains analyzed :	28
Total # of containers :	990
Total # of valid containers :	937
Total # of code found CAM 1 :	524
Total # of code found CAM 2 :	501
Total # of code found PoM :	729
# of perfect match code :	639
% of perfect match code :	87.65%

INVALIDITY

Total # of invalid containers C1 :	137
Total # of invalid containers C2 :	181
Total # of invalid containers :	53
Invalidity rate C1 :	13.84%
Invalidity rate C2 :	10.20%
Global invalidity rate :	5.35%

SPEED

Average min speed :	8
Average max. speed :	12.3
Average speed :	10.8

PoM	Mean Accuracy/all cont.	73.64%
	Mean Accuracy/valid cont.	77.80%
Cam 1	Mean Accuracy/all cont. C1	52.93%
	Mean Accuracy/valid cont. C1	61.43%
Cam 2	Mean Accuracy/all cont. C2	50.61%
	Mean Accuracy/valid cont. C2	56.36%

By comparing these results (11 train moves) with those obtained for the test period as a whole, DTI deduces that:

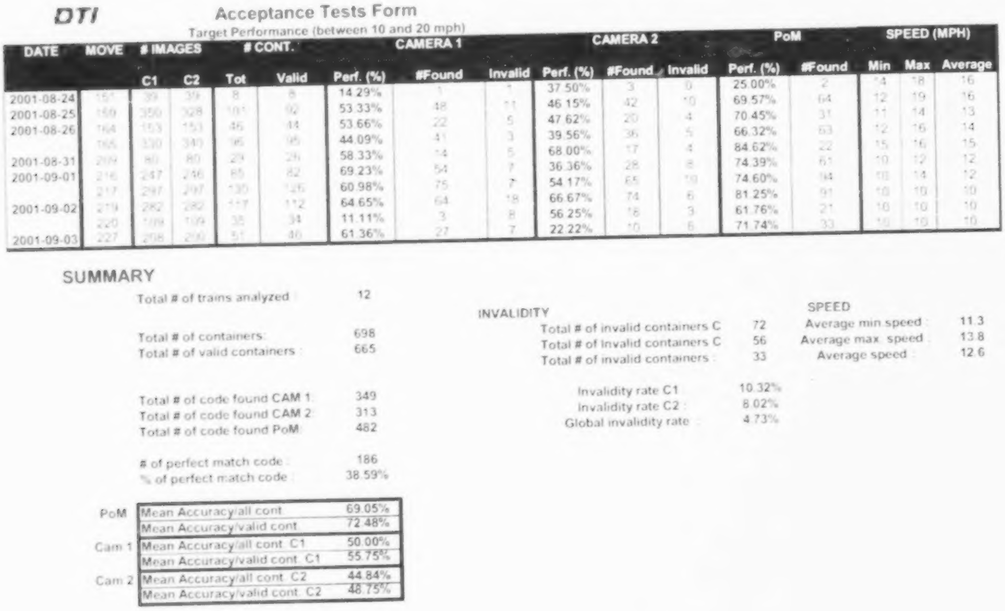
> The camera adjustment had a major impact on the results: the overall accuracy for all containers observed is greater (73.6% vs. 70.7%), as is the overall accuracy for the "valid" containers (77.8% vs. 73.9%) ➜ The target threshold of 80% is nearly achieved when conditions are optimal.
>
> The accuracy obtained on the two cameras for all containers follows the same trend: a slight increase for both camera 1 (52.9% vs. 49.5%) and camera 2 (50.6% vs. 48.6%).

DTI concludes that the adjustment had an important impact on the results obtained during the test period. It confirms that the OCR accuracy obtained by the system depends largely on the state of the site's physical configuration.

Accuracy – target speed interval between 10 and 20 MPH

Table 18 presents the results obtained when trains travel within the speed determined in the Port of Montreal's acceptance criteria, namely 15 mph 5. Among the trains observed during the period, only 10 of 24 conformed to this speed criterion.

Table 18 Accuracy rate – speed moves between 10 and 20 mph



DTI

Acceptance Tests Form

Target Performance (between 10 and 20 mph)

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-24	151	39	39	8	8	14.29%	1	1	37.50%	3	0	25.00%	2	14	18	16
2001-08-25	159	350	328	101	92	53.33%	48	11	46.15%	42	10	69.57%	64	12	19	16
2001-08-26	164	153	153	46	44	53.66%	22	5	47.62%	20	4	70.45%	31	11	14	13
	165	330	340	96	95	44.09%	41	3	39.56%	36	5	66.32%	63	12	16	14
2001-08-31	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15
2001-09-01	216	247	246	85	82	69.23%	54	7	36.36%	28	8	74.39%	61	10	12	12
	217	297	297	130	126	60.98%	75	7	54.17%	65	10	74.60%	94	10	14	12
2001-09-02	219	282	282	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	10	10	10
	220	109	109	38	34	11.11%	3	8	56.25%	18	3	61.76%	21	10	10	10
2001-09-03	227	208	208	51	46	61.36%	27	7	22.22%	10	5	71.74%	33	10	10	10

SUMMARY

Total # of trains analyzed :	12
Total # of containers:	698
Total # of valid containers :	665
Total # of code found CAM 1:	349
Total # of code found CAM 2:	313
Total # of code found PoM:	482
# of perfect match code :	186
% of perfect match code :	38.59%

INVALIDITY

Total # of invalid containers C	72
Total # of invalid containers C	56
Total # of invalid containers :	33
Invalidity rate C1 :	10.32%
Invalidity rate C2 :	8.02%
Global invalidity rate :	4.73%

SPEED

Average min speed :	11.3
Average max. speed :	13.8
Average speed :	12.6

PoM	Mean Accuracy/all cont	69.05%
	Mean Accuracy/valid cont	72.48%
Cam 1	Mean Accuracy/all cont. C1	50.00%
	Mean Accuracy/valid cont. C1	55.75%
Cam 2	Mean Accuracy/all cont. C2	44.84%
	Mean Accuracy/valid cont. C2	48.75%

Despite this, the accuracy obtained is similar to the rate obtained overall (69.1% vs. 70.7%, 72.5% vs. 73.9% for the "valid" containers). Analysis of the results led to the following interpretations:

The camera accuracy rates are essentially the same (50% vs. 49.5% for camera 1; 44.8% vs. 48.6% for camera 2).

Since the accuracy rate obtained is between 25% and 84.6%, the constant speed of a move cannot guarantee better results (only 2 out of 10 moves achieved the 80% threshold).

All these moves except for #217 were observed at night. The activities around Mosaïcultures definitely affected the number of daytime movements observed.

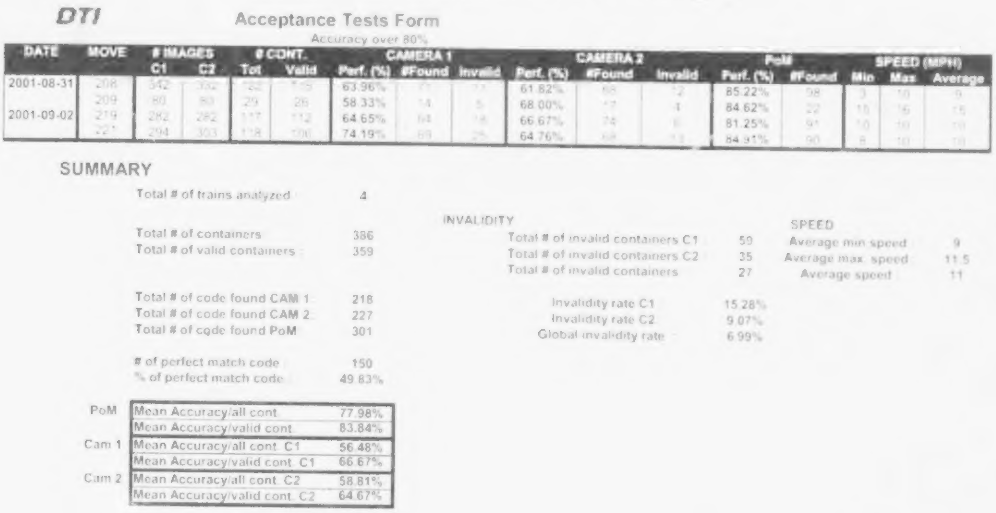
Only one train exceeded the maximum limit of 20 mph (peak of 21 mph recorded for #181 – the overexposure problem prevented calculation of accuracy for this move).

DTI concludes that speed had little impact on the overall accuracy obtained in the acceptance tests. However, it is important to note that the image grabber limit in relation to the maximum speed of a move was almost reached (22 mph according to the information received from CCTC).

Accuracy above the 80% limit

Table 19 presents the train moves with an optical recognition accuracy level greater than the threshold determined by the Port of Montreal and TDC. To determine the optimal conditions for system configuration required to reach this limit, it is important to establish a correlation between these moves.

Table 19 Accuracy rate – 80% and higher



DTI

Acceptance Tests Form

Accuracy over 80%

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-31	208	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	3	10	9
	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15
2001-09-02	219	282	282	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	10	10	10
	221	294	303	118	106	74.19%	69	25	64.76%	68	13	84.91%	90	8	10	10

SUMMARY

Total # of trains analyzed :	4
Total # of containers	386
Total # of valid containers :	359
Total # of code found CAM 1 :	218
Total # of code found CAM 2 :	227
Total # of code found PoM	301
# of perfect match code :	150
% of perfect match code :	49.83%

INVALIDITY

Total # of invalid containers C1 :	59
Total # of invalid containers C2 :	35
Total # of invalid containers	27
Invalidity rate C1	15.28%
Invalidity rate C2	9.07%
Global invalidity rate :	6.99%

SPEED

Average min speed :	9
Average max. speed :	11.5
Average speed :	11

PoM	Mean Accuracy/all cont.	77.98%
	Mean Accuracy/valid cont.	83.84%
Cam 1	Mean Accuracy/all cont. C1	56.48%
	Mean Accuracy/valid cont. C1	66.67%
Cam 2	Mean Accuracy/all cont. C2	58.81%
	Mean Accuracy/valid cont. C2	64.67%

Only four train moves out of the 24 analyzed reached the critical threshold. All, without exception, occurred after the adjustments to camera 1 by CCTC. Moves #208 and #209 immediately followed these adjustments, while the other two moves were made in the following days.

All these moves except for #217 were observed at night. The activities around Mosaïcultures definitely affected the number of daytime movements observed.

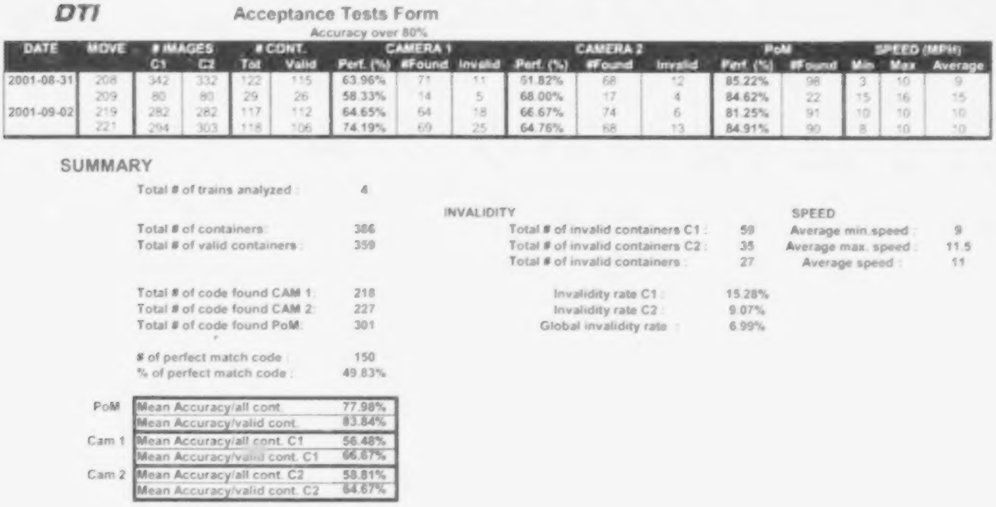
Only one train exceeded the maximum limit of 20 mph (peak of 21 mph recorded for #181 – the overexposure problem prevented calculation of accuracy for this move).

DTI concludes that speed had little impact on the overall accuracy obtained in the acceptance tests. However, it is important to note that the image grabber limit in relation to the maximum speed of a move was almost reached (22 mph according to the information received from CCTC).

Accuracy above the 80% limit

Table 19 presents the train moves with an optical recognition accuracy level greater than the threshold determined by the Port of Montreal and TDC. To determine the optimal conditions for system configuration required to reach this limit, it is important to establish a correlation between these moves.

Table 19 Accuracy rate – 80% and higher



DTI

Acceptance Tests Form

Accuracy over 80%

DATE	MOVE	# IMAGES		# CONT.		CAMERA 1			CAMERA 2			PoM		SPEED (MPH)		
		C1	C2	Tot	Valid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Invalid	Perf. (%)	#Found	Min	Max	Average
2001-08-31	208	342	332	122	115	63.96%	71	11	61.82%	68	12	85.22%	98	3	10	9
	209	80	80	29	26	58.33%	14	5	68.00%	17	4	84.62%	22	15	16	15
2001-09-02	219	282	282	117	112	64.65%	64	18	66.67%	74	6	81.25%	91	10	10	10
	221	294	303	118	106	74.19%	69	25	64.76%	68	13	84.91%	90	8	10	10

SUMMARY

Total # of trains analyzed : 4

Total # of containers: 386
Total # of valid containers : 359

Total # of code found CAM 1: 218
Total # of code found CAM 2: 227
Total # of code found PoM: 301

# of perfect match code : 150
% of perfect match code : 49.83%

INVALIDITY

Total # of invalid containers C1 : 59
Total # of invalid containers C2 : 35
Total # of invalid containers : 27

Invalidity rate C1 : 15.28%
Invalidity rate C2 : 9.07%
Global invalidity rate : 6.99%

SPEED

Average min.speed : 9
Average max. speed : 11.5
Average speed : 11

PoM	Mean Accuracy/all cont.	77.98%
	Mean Accuracy/valid cont.	83.84%
Cam 1	Mean Accuracy/all cont. C1	56.48%
	Mean Accuracy/valid cont. C1	66.67%
Cam 2	Mean Accuracy/all cont. C2	58.81%
	Mean Accuracy/valid cont. C2	64.67%

Only four train moves out of the 24 analyzed reached the critical threshold. All, without exception, occurred after the adjustments to camera 1 by CCTC. Moves #208 and #209 immediately followed these adjustments, while the other two moves were made in the following days.

In verifying all the moves up to this time, DTI noticed that, even though the other moves did not reach the specified threshold, their accuracy rate approached it. DTI also noted that the accuracy rate fell to a lower level during the last few days of the test period. This could be related to the second Solid State Relay (SSR) failure that occurred during these days.

DTI concludes that the accuracy rate is optimal when all the equipment comprising the site's physical configuration is functioning correctly. However, it is important to note that to maintain the optimal positioning of the two cameras many adjustments are required.

Accuracy per container company

One of the questions regarding the accuracy rates recorded concerns the containers. They come from a multitude of different companies spread over almost all of North America. Although the ISO 6346 standard governs the identification of the containers, the companies do not always conform to this recognized standard. Moreover, the general condition of the containers may have a major impact on the optical recognition of these identifiers.

Tables 20 and 21 show the results obtained by company (the first four letters of the code identify a specific company). Table 20 presents the overall results. Table 21 presents a sample of the companies with 20 containers that were observed during this period.

Composition of the container identification code (XXXX 999999 0):

XXXX = owner company code + equipment category
999999 = serial number assigned to the container
0 = check digit

Table 20 Accuracy rate for all container companies

DTI

Accuracy for all container companies

CODE	# OF CONT	CAMERA 1					CAMERA 2					PoM				
		Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All
ACTU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	0	0.00%	0.00%
AJCU	1	1	100.00%	0	#DIV/0!	0.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	0	0.00%	0.00%
ALNU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
APMU	41	2	4.88%	24	61.54%	58.54%	5	12.20%	16	44.44%	39.02%	1	2.44%	30	75.00%	73.17%
BENU	4	0	0.00%	2	50.00%	50.00%	0	0.00%	2	50.00%	50.00%	0	0.00%	3	75.00%	75.00%
BHCU	2	0	0.00%	2	100.00%	100.00%	1	50.00%	1	100.00%	50.00%	0	0.00%	2	100.00%	100.00%
BSLY	2	0	0.00%	0	0.00%	0.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	0	0.00%	0.00%
CACU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
CAXU	37	18	48.65%	5	26.32%	13.51%	4	10.81%	9	27.27%	24.32%	1	2.70%	14	38.89%	37.84%
CCRU	4	0	0.00%	1	25.00%	25.00%	0	0.00%	1	25.00%	25.00%	0	0.00%	2	50.00%	50.00%
CLHU	43	10	23.26%	20	60.61%	46.51%	10	23.26%	20	60.61%	46.51%	9	20.93%	28	82.35%	65.12%
CLOU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
CMBU	9	5	55.56%	1	25.00%	11.11%	1	11.11%	2	25.00%	22.22%	1	11.11%	3	37.50%	33.33%
CNGU	14	31	221.43%	0	0.00%	0.00%	12	85.71%	0	0.00%	0.00%	12	85.71%	0	0.00%	0.00%
CPIU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%
CRLU	18	1	5.56%	12	70.59%	66.67%	1	5.56%	12	70.59%	66.67%	0	0.00%	16	88.89%	88.89%
CRXU	18	2	11.11%	8	50.00%	44.44%	3	16.67%	10	66.67%	55.56%	2	11.11%	14	87.50%	77.78%
CTXU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
DAYU	4	0	0.00%	2	50.00%	50.00%	2	50.00%	2	100.00%	50.00%	0	0.00%	2	50.00%	50.00%
EACU	2	0	0.00%	2	100.00%	100.00%	0	0.00%	1	50.00%	50.00%	0	0.00%	2	100.00%	100.00%
EISU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
EMCU	2	0	0.00%	1	50.00%	50.00%	1	50.00%	0	0.00%	0.00%	0	0.00%	0	0.00%	0.00%
FBLU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%
FRLU	5	1	20.00%	3	75.00%	60.00%	0	0.00%	5	100.00%	100.00%	0	0.00%	4	80.00%	80.00%
FSCU	7	0	0.00%	5	71.43%	71.43%	0	0.00%	6	85.71%	85.71%	0	0.00%	6	85.71%	85.71%
GAEU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
GATU	61	2	3.28%	40	67.80%	65.57%	4	6.56%	28	49.12%	45.90%	0	0.00%	44	72.13%	72.13%
GBEU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%
GCEU	6	2	33.33%	3	75.00%	50.00%	0	0.00%	4	66.67%	66.67%	0	0.00%	5	83.33%	83.33%
GESU	12	1	8.33%	5	45.45%	41.67%	0	0.00%	5	41.67%	41.67%	0	0.00%	6	50.00%	50.00%
GLDU	45	3	6.67%	21	50.00%	46.67%	3	6.67%	12	28.57%	26.67%	0	0.00%	36	80.00%	80.00%
GSTU	44	26	59.09%	8	44.44%	18.18%	8	18.18%	12	33.33%	27.27%	6	13.64%	18	47.37%	40.91%
HDLU	3	3	100.00%	0	#DIV/0!	0.00%	0	0.00%	1	33.33%	33.33%	0	0.00%	1	33.33%	33.33%
HLCU	124	23	18.55%	46	45.54%	37.10%	23	18.55%	42	41.58%	33.87%	13	10.48%	70	63.06%	56.45%
HLXU	246	11	4.47%	163	69.36%	66.26%	6	2.44%	148	61.67%	60.16%	4	1.63%	200	82.64%	81.30%
ICSU	7	1	14.29%	4	66.67%	57.14%	1	14.29%	4	66.67%	57.14%	1	14.29%	5	83.33%	71.43%
IEAU	5	0	0.00%	3	60.00%	60.00%	0	0.00%	2	40.00%	40.00%	0	0.00%	4	80.00%	80.00%
INBU	36	8	22.22%	11	39.29%	30.56%	7	19.44%	18	62.07%	50.00%	4	11.11%	22	68.75%	61.11%
INKU	17	3	17.65%	7	50.00%	41.18%	4	23.53%	8	61.54%	47.06%	2	11.76%	11	73.33%	64.71%
ITLU	9	0	0.00%	5	55.56%	55.56%	1	11.11%	4	50.00%	44.44%	0	0.00%	6	66.67%	66.67%
KNLU	75	10	13.33%	36	55.38%	48.00%	6	8.00%	33	47.83%	44.00%	2	2.67%	59	80.82%	78.67%
MAEU	264	21	7.95%	133	54.73%	50.38%	17	6.44%	106	42.91%	40.15%	5	1.89%	196	75.29%	73.86%
MCAU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
MHHU	2	0	0.00%	0	0.00%	0.00%	0	0.00%	1	50.00%	50.00%	0	0.00%	0	0.00%	0.00%
MLCU	11	1	9.09%	4	40.00%	36.36%	0	0.00%	6	54.55%	54.55%	0	0.00%	6	54.55%	54.55%
MMMU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%
MSAU	4	0	0.00%	2	50.00%	50.00%	0	0.00%	1	25.00%	25.00%	0	0.00%	1	25.00%	25.00%
MSKU	115	3	2.61%	84	75.00%	73.04%	3	2.61%	66	58.93%	57.39%	0	0.00%	89	77.39%	77.39%
MWCU	33	2	6.06%	11	35.48%	33.33%	0	0.00%	15	45.45%	45.45%	0	0.00%	18	54.55%	54.55%
NDLU	6	0	0.00%	1	16.67%	16.67%	0	0.00%	1	16.67%	16.67%	0	0.00%	1	16.67%	16.67%
NUKU	3	0	0.00%	1	33.33%	33.33%	0	0.00%	0	0.00%	0.00%	0	0.00%	1	33.33%	33.33%
NYKU	29	1	3.45%	6	21.43%	20.69%	2	6.90%	8	29.63%	27.59%	1	3.45%	13	46.43%	44.83%
OCLU	50	7	14.00%	24	55.81%	48.00%	6	12.00%	22	50.00%	44.00%	2	4.00%	31	64.58%	62.00%
OOLU	29	1	3.45%	17	60.71%	58.62%	1	3.45%	13	46.43%	44.83%	0	0.00%	20	68.97%	68.97%
PCVU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%
POCU	84	6	7.14%	46	58.97%	54.76%	4	4.76%	47	58.75%	55.95%	1	1.19%	66	79.52%	78.57%
PONU	198	7	3.54%	128	67.02%	64.65%	6	3.03%	131	68.23%	66.16%	0	0.00%	165	83.33%	83.33%
PRSU	7	0	0.00%	3	42.86%	42.86%	0	0.00%	1	14.29%	14.29%	0	0.00%	4	57.14%	57.14%
REDU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
RMCU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	0	0.00%	0.00%
SAMU	16	5	31.25%	3	27.27%	18.75%	3	18.75%	5	38.46%	31.25%	2	12.50%	8	57.14%	50.00%

Table 20 (cont'd)

DTI

Accuracy for all container companies

CODE	# OF	CAMERA 1					CAMERA 2					PoM				
	CONT	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All
SCMU	26	1	3.85%	14	56.00%	53.85%	0	0.00%	12	46.15%	46.15%	0	0.00%	21	80.77%	80.77%
SCZU	8	0	0.00%	5	62.50%	62.50%	0	0.00%	5	62.50%	62.50%	0	0.00%	7	87.50%	87.50%
SEAU	148	10	6.76%	58	42.03%	39.19%	10	6.76%	83	60.14%	56.08%	0	0.00%	111	75.00%	75.00%
SIPU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
SNIU	3	0	0.00%	2	66.67%	66.67%	0	0.00%	1	33.33%	33.33%	0	0.00%	2	66.67%	66.67%
TEXU	38	4	10.53%	20	58.82%	52.63%	6	15.79%	20	62.50%	52.63%	3	7.89%	29	82.86%	76.32%
TGHU	16	2	12.50%	5	35.71%	31.25%	1	6.25%	8	53.33%	50.00%	1	6.25%	10	66.67%	62.50%
TOLU	11	3	27.27%	3	37.50%	27.27%	4	36.36%	4	57.14%	36.36%	3	27.27%	5	62.50%	45.45%
TOPU	2	1	50.00%	0	0.00%	0.00%	1	50.00%	1	100.00%	50.00%	1	50.00%	1	100.00%	50.00%
TPHU	12	0	0.00%	8	66.67%	66.67%	0	0.00%	7	58.33%	58.33%	0	0.00%	10	83.33%	83.33%
TPXU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
TRIU	70	8	11.43%	35	56.45%	50.00%	9	12.86%	34	55.74%	48.57%	3	4.29%	48	71.64%	68.57%
TRLU	44	2	4.55%	26	61.90%	59.09%	2	4.55%	29	69.05%	65.91%	0	0.00%	35	79.55%	79.55%
TTNU	110	24	21.82%	14	16.28%	12.73%	2	1.82%	32	29.63%	29.09%	2	1.82%	69	63.89%	62.73%
UESU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
UXXU	11	2	18.18%	6	66.67%	54.55%	1	9.09%	5	50.00%	45.45%	0	0.00%	9	81.82%	81.82%
YMLU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%
ZCSU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%

Table 20 Accuracy rate for all container companies

DTI

Accuracy for all container companies

CODE	# OF CONT	CAMERA 1					CAMERA 2					PoM				
		Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All
ACTU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AJCU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ALNU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APMU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BENU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BHCU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BSLY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CACU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CAXU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CCRU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CLHU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CLOU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CMBU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CNGU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CPIU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CRLU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CRXU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CTXU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DAYU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
EACU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
EISU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
EMCU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FBLU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FRLU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FSCU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GAEU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GATU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GBEU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GCEU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GESU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GLDU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GSTU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HDLU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HLCU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HLXU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ICSU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IEAU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
INBU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
INKU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ITLU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
KNLU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAEU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MCAU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MHHU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MLCU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MMMU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MSAU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MSKU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MWCU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NDLU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NUKU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NYKU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OCLU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OOLU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PCVU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
POCU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PONU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PRSU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
REDU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
RMCU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SAMU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Table 20 (cont'd)

DTI

Accuracy for all container companies

CODE	# OF	CAMERA 1					CAMERA 2					PoM				
	CONT	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All
SCMU	26	1	3.85%	14	56.00%	53.85%	0	0.00%	12	46.15%	46.15%	0	0.00%	21	80.77%	80.77%
SCZU	8	0	0.00%	5	62.50%	62.50%	0	0.00%	5	62.50%	62.50%	0	0.00%	7	87.50%	87.50%
SEAU	148	10	6.76%	58	42.03%	39.19%	13	8.78%	83	61.48%	56.08%	0	0.00%	111	75.00%	75.00%
SIPU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
SNIU	3	0	0.00%	2	66.67%	66.67%	0	0.00%	1	33.33%	33.33%	0	0.00%	2	66.67%	66.67%
TEXU	38	4	10.53%	20	58.82%	52.63%	6	15.79%	20	62.50%	52.63%	3	7.89%	29	82.86%	76.32%
TGHU	16	2	12.50%	5	35.71%	31.25%	1	6.25%	8	53.33%	50.00%	1	6.25%	10	66.67%	62.50%
TOLU	11	3	27.27%	3	37.50%	27.27%	4	36.36%	4	57.14%	36.36%	3	27.27%	5	62.50%	45.45%
TOPU	2	1	50.00%	0	0.00%	0.00%	1	50.00%	1	100.00%	50.00%	1	50.00%	1	100.00%	50.00%
TPHU	12	0	0.00%	8	66.67%	66.67%	0	0.00%	7	58.33%	58.33%	0	0.00%	10	83.33%	83.33%
TPXU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
TRIU	70	8	11.43%	35	56.45%	50.00%	9	12.86%	34	55.74%	48.57%	3	4.29%	48	71.64%	68.57%
TRLU	44	2	4.55%	26	61.90%	59.09%	2	4.55%	29	69.05%	65.91%	0	0.00%	35	79.55%	79.55%
TTNU	110	24	21.82%	14	16.28%	12.73%	2	1.82%	32	29.63%	29.09%	2	1.82%	69	63.89%	62.73%
UESU	1	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%	0	0.00%	1	100.00%	100.00%
UXXU	11	2	18.18%	6	66.67%	54.55%	1	9.09%	5	50.00%	45.45%	0	0.00%	9	81.82%	81.82%
YMLU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%
ZCSU	1	0	0.00%	1	100.00%	100.00%	0	0.00%	0	0.00%	0.00%	0	0.00%	1	100.00%	100.00%

Table 21 Accuracy rate for companies with most containers

DTI

Accuracy per company

CODE	# OF CONT.	CAMERA 1					CAMERA 2					PoM				
		Invalid	% invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% invalid	Code found	Accuracy Valid	Accuracy All
APMU	41	2	4.88%	24	61.54%	58.54%	5	12.20%	16	44.44%	39.02%	1	2.44%	30	75.00%	73.17%
CAXU	37	18	48.65%	5	26.32%	13.51%	4	10.81%	9	27.27%	24.32%	1	2.70%	14	38.89%	37.84%
CLHU	43	10	23.26%	20	60.61%	46.51%	10	23.26%	20	60.61%	46.51%	9	20.93%	28	82.35%	65.12%
GATU	61	2	3.28%	40	67.80%	65.57%	4	6.56%	28	49.12%	45.90%	0	0.00%	44	72.13%	72.13%
GLDU	45	3	6.67%	21	50.00%	46.67%	3	6.67%	12	28.57%	26.67%	0	0.00%	36	80.00%	80.00%
GSTU	44	26	59.09%	8	44.44%	18.18%	8	18.18%	12	33.33%	27.27%	6	13.64%	18	47.37%	40.91%
HLCU	124	23	18.55%	46	45.54%	37.10%	23	18.55%	42	41.58%	33.87%	13	10.48%	70	63.06%	56.45%
HLXU	246	11	4.47%	163	69.36%	66.26%	6	2.44%	148	61.67%	60.16%	4	1.63%	200	82.64%	81.30%
INBU	36	8	22.22%	11	39.29%	30.56%	7	19.44%	18	62.07%	50.00%	4	11.11%	22	68.75%	61.11%
KNLU	75	10	13.33%	36	55.38%	48.00%	6	8.00%	33	47.83%	44.00%	2	2.67%	59	80.82%	78.67%
MAEU	264	21	7.95%	133	54.73%	50.38%	17	6.44%	106	42.91%	40.15%	5	1.89%	195	75.29%	73.86%
MSKU	115	3	2.61%	84	75.00%	73.04%	3	2.61%	66	58.93%	57.39%	0	0.00%	89	77.39%	77.39%
MWCU	33	2	6.06%	11	35.48%	33.33%	0	0.00%	15	45.45%	45.45%	0	0.00%	18	54.55%	54.55%
NYKU	29	1	3.45%	6	21.43%	20.69%	2	6.90%	8	29.63%	27.59%	1	3.45%	13	46.43%	44.83%
OCLU	50	7	14.00%	24	55.81%	48.00%	6	12.00%	22	50.00%	44.00%	2	4.00%	31	64.58%	62.00%
OOLU	29	1	3.45%	17	60.71%	58.62%	1	3.45%	13	46.43%	44.83%	0	0.00%	20	68.97%	68.97%
POCU	84	6	7.14%	46	58.97%	54.76%	4	4.76%	47	58.75%	55.95%	1	1.19%	66	79.52%	78.57%
PONU	198	7	3.54%	128	67.02%	64.65%	6	3.03%	131	68.23%	66.16%	0	0.00%	165	83.33%	83.33%
SCMU	26	1	3.85%	14	56.00%	53.85%	0	0.00%	12	46.15%	46.15%	0	0.00%	21	80.77%	80.77%
SEAU	148	10	6.76%	58	42.03%	39.19%	10	6.76%	83	60.14%	56.08%	0	0.00%	111	75.00%	75.00%
TEXU	38	4	10.53%	20	58.82%	52.63%	6	15.79%	20	62.50%	52.63%	3	7.89%	29	82.86%	76.32%
TRIU	70	8	11.43%	35	56.45%	50.00%	9	12.86%	34	55.74%	48.57%	3	4.29%	48	71.64%	68.57%
TRLU	44	2	4.55%	26	61.90%	59.09%	2	4.55%	29	69.05%	65.91%	0	0.00%	35	79.55%	79.55%
TTNU	110	24	21.82%	14	16.28%	12.73%	2	1.82%	32	29.63%	29.09%	2	1.82%	69	63.89%	62.73%

SUMMARY

	CAMERA 1	CAMERA 1	PoM
% of invalidity	12.98%	8.63%	3.76%
Accuracy / Valid cont.	51.71%	49.17%	70.62%
Accuracy / All cont.	45.91%	44.90%	68.05%

The following interpretations concerning the companies with the most containers are derived from the above results:

Nearly 3.8% of these containers cannot be identified by the two (2) cameras.

The accuracy obtained for these containers is similar to the overall accuracy obtained. The same observation applies for the accuracy obtained by each camera.

Four container companies achieved the accuracy level with difficulty. The maximum percentage obtained was 83.3%.

DTI concludes that the accuracy rate obtained is an overall result for all companies and not based on the poor performance of a few.

Table 21 Accuracy rate for companies with most containers

DTI

Accuracy per company

CODE	# OF CONT	CAMERA 1					CAMERA 2					PoM				
		Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All	Invalid	% Invalid	Code found	Accuracy Valid	Accuracy All
APMU	41	2	4.88%	24	61.54%	58.54%	5	12.20%	16	44.44%	39.02%	1	2.44%	30	75.00%	73.17%
CAXU	37	18	48.65%	5	26.32%	13.51%	4	10.81%	9	27.27%	24.32%	1	2.70%	14	38.89%	37.84%
CLHU	43	10	23.26%	20	60.61%	46.51%	10	23.26%	20	60.61%	46.51%	9	20.93%	28	82.35%	65.12%
GATU	61	2	3.28%	40	67.80%	65.57%	4	6.56%	28	49.12%	45.90%	0	0.00%	44	72.13%	72.13%
GLDU	45	3	6.67%	21	50.00%	46.67%	3	6.67%	12	28.57%	26.67%	0	0.00%	36	80.00%	80.00%
GSTU	44	26	59.09%	8	44.44%	18.18%	8	18.18%	12	33.33%	27.27%	6	13.64%	18	47.37%	40.91%
HLCU	124	23	18.55%	46	45.54%	37.10%	23	18.55%	42	41.58%	33.87%	13	10.48%	70	63.06%	56.45%
HLXU	246	11	4.47%	163	69.36%	66.26%	6	2.44%	148	61.67%	60.16%	4	1.63%	200	82.64%	81.30%
INBU	36	8	22.22%	11	39.29%	30.56%	7	19.44%	18	62.07%	50.00%	4	11.11%	22	68.75%	61.11%
KNLU	75	10	13.33%	36	55.38%	48.00%	6	8.00%	33	47.83%	44.00%	2	2.67%	59	80.82%	78.67%
MAEU	264	21	7.95%	133	54.73%	50.38%	17	6.44%	106	42.91%	40.15%	5	1.89%	195	75.29%	73.86%
MSKU	115	3	2.61%	84	75.00%	73.04%	3	2.61%	66	58.93%	57.39%	0	0.00%	89	77.39%	77.39%
MWCU	33	2	6.06%	11	35.48%	33.33%	0	0.00%	15	45.45%	45.45%	0	0.00%	18	54.55%	54.55%
NYKU	29	1	3.45%	6	21.43%	20.69%	2	6.90%	8	29.63%	27.59%	1	3.45%	13	46.43%	44.83%
OCLU	50	7	14.00%	24	55.81%	48.00%	6	12.00%	22	50.00%	44.00%	2	4.00%	31	64.58%	62.00%
OOLU	29	1	3.45%	17	60.71%	58.62%	1	3.45%	13	46.43%	44.83%	0	0.00%	20	68.97%	68.97%
POCU	84	6	7.14%	46	58.97%	54.76%	4	4.76%	47	58.75%	55.95%	1	1.19%	66	79.52%	78.57%
PONU	198	7	3.54%	128	67.02%	64.65%	6	3.03%	131	68.23%	66.16%	0	0.00%	165	83.33%	83.33%
SCMU	26	1	3.85%	14	56.00%	53.85%	0	0.00%	12	46.15%	46.15%	0	0.00%	21	80.77%	80.77%
SEAU	148	10	6.76%	58	42.03%	39.19%	10	6.76%	83	60.14%	56.08%	0	0.00%	111	75.00%	75.00%
TEXU	38	4	10.53%	20	58.82%	52.63%	6	15.79%	20	62.50%	52.63%	3	7.89%	29	82.86%	76.32%
TRIU	70	8	11.43%	35	56.45%	50.00%	9	12.86%	34	55.74%	48.57%	3	4.29%	48	71.64%	68.57%
TRLU	44	2	4.55%	26	61.90%	59.09%	2	4.55%	29	69.05%	65.91%	0	0.00%	35	79.55%	79.55%
TTNU	110	24	21.82%	14	16.28%	12.73%	2	1.82%	32	29.63%	29.09%	2	1.82%	69	63.89%	62.73%

SUMMARY

CAMERA 1		CAMERA 1		PoM	
% of invalidity	12.98%	% of invalidity	8.63%	% of invalidity	3.76%
Accuracy / Valid cont	51.71%	Accuracy / Valid cont	49.17%	Accuracy / Valid cont	70.62%
Accuracy / All cont	45.91%	Accuracy / All cont	44.90%	Accuracy / All cont	68.05%

The following interpretations concerning the companies with the most containers are derived from the above results:

Nearly 3.8% of these containers cannot be identified by the two (2) cameras.

The accuracy obtained for these containers is similar to the overall accuracy obtained. The same observation applies for the accuracy obtained by each camera.

Four container companies achieved the accuracy level with difficulty. The maximum percentage obtained was 83.3%.

DTI concludes that the accuracy rate obtained is an overall result for all companies and not based on the poor performance of a few.

6 RECOMMENDATIONS

6.1 Equipment and Infrastructure

The physical installation requires replacement and upgrading of equipment, cameras, lenses, and lights (illumination, reference, and adjustment), as well as modifications to solid state relays, breakers, and wiring. In addition, electrical components need to be replaced and wheel detectors repositioned. The AEI/OCR system located in the site bungalow should be equipped with an alarm and monitoring system to alert the operators of equipment malfunction.

6.1.1 Cameras

Since the cameras are a crucial component of the AEI/OCR system, the quality of the train images they capture has a major impact on the optical recognition accuracy provided by the OCR component. Table 22 summarizes the percentages obtained during the test period for each camera's yield.

Table 22 Statistics per camera side

Situation	CAMERA 1		CAMERA 2	
	All cont. (%)	Valid cont. (%)	All cont. (%)	Valid cont. (%)
Overall OCR accuracy	49.5	55.7	48.6	53.0
Accuracy – day	50.7	56.5	48.2	52.8
Accuracy – evening / night	49.2	55.5	48.6	53.1
Accuracy after August 30, 2001	52.9	61.4	50.6	56.4
Accuracy – speed between 10 and 20 mph	50.0	55.8	44.8	48.8
Accuracy – threshold achieved (80%)	56.5	66.7	58.8	64.7
Accuracy – most frequent container companies	45.9	51.7	44.9	49.2

In general, the accuracy obtained with camera 1 is slightly greater than for camera 2. Several factors may influence these results: the different lenses used on each camera, the housing and camera fastening mechanism, and the pods and poles on which the cameras are installed.

Cameras and lenses

Two EG&G LC3000 1024-pixel cameras are currently used, though each has a different lens and associate controller. Camera 1 has an external controller (lens model V15-90AC, serial number 1308, lens controller serial number 0078). Figure 7 presents the inside of the housing where this equipment is installed.

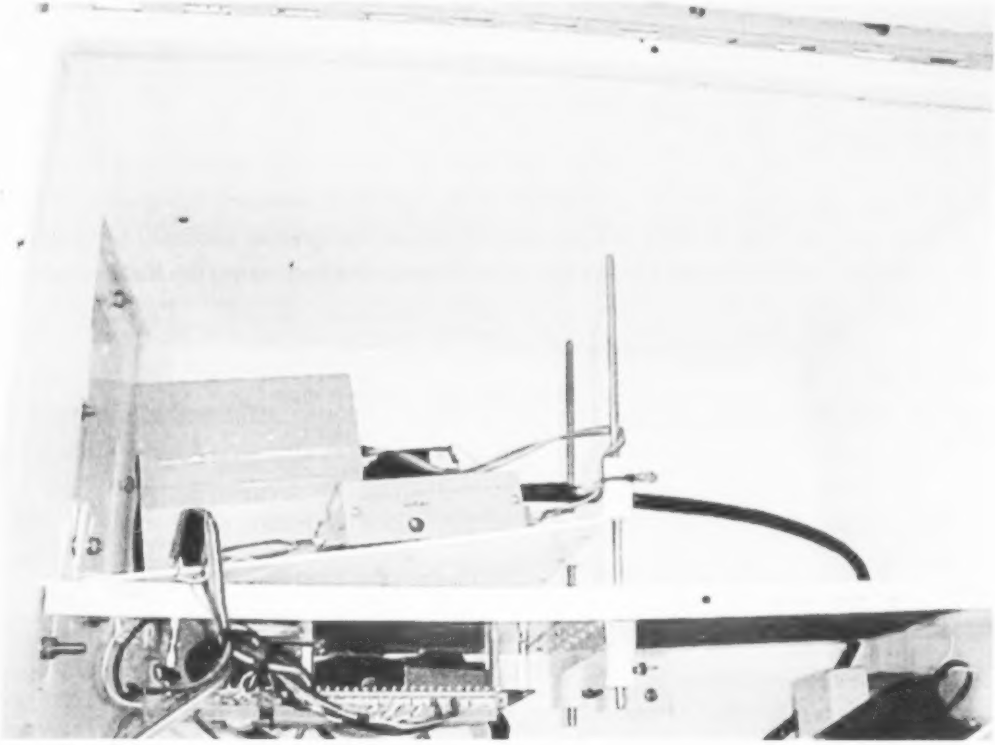


Figure 7 Camera 1

The lens used by camera 2 differs from that of camera 1. It is made by another company. This camera lens is made by Burle, model TC1843, serial number B12ZCME-5, and it has an integral lens controller. Figure 8 shows the inside of the housing in which this camera is installed.

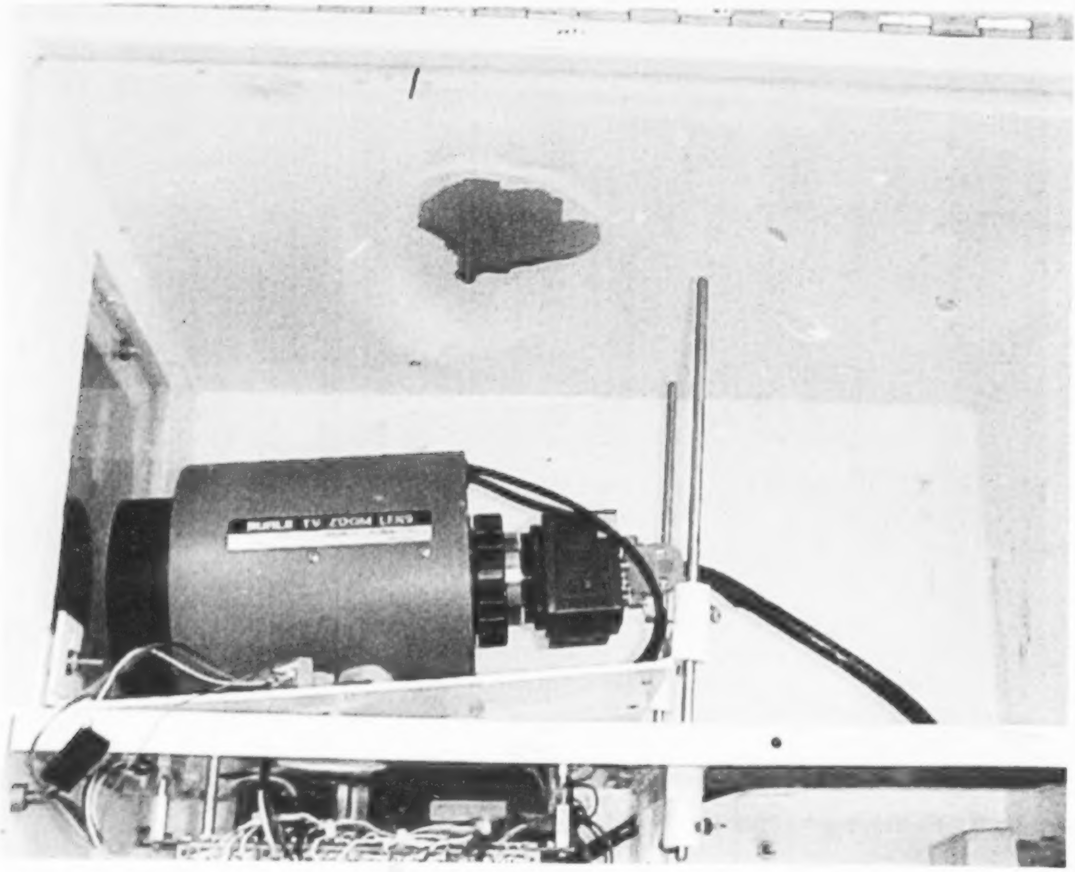


Figure 8 Camera 2

The camera currently uses 16 mm lenses which are very difficult to find on the market. According to CCTC, these lenses could be replaced eventually by 25 mm lenses because of the latter's better availability on the market. The selection of the replacement lenses will require a more thorough study, since they must conform to the same specifications as the ones being replaced (i.e., 1024 pixels 1").

Housing and fastening mechanism

Physically, each camera is installed in a housing fastened to a pole. Inside the housing, the camera is installed on a metal plate and fastened with an adjustable device (see Figure 9).

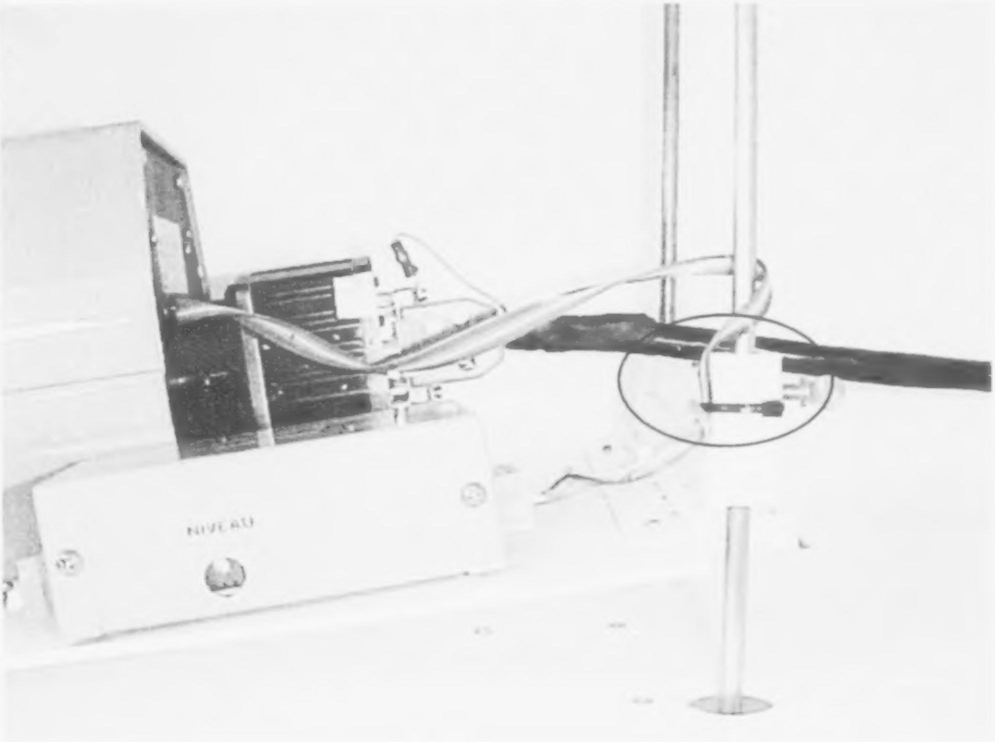


Figure 9 Fastening mechanism

Regarding the camera fastening mechanisms, DTI noted that the fastening screws and the slides are not secure enough. During the test period, one of these screws came completely loose because of the vibration generated by passing trains. This problem will therefore have to be corrected.

Figure 10 shows the inside of the bottom part of the camera housing and the equipment it contains.

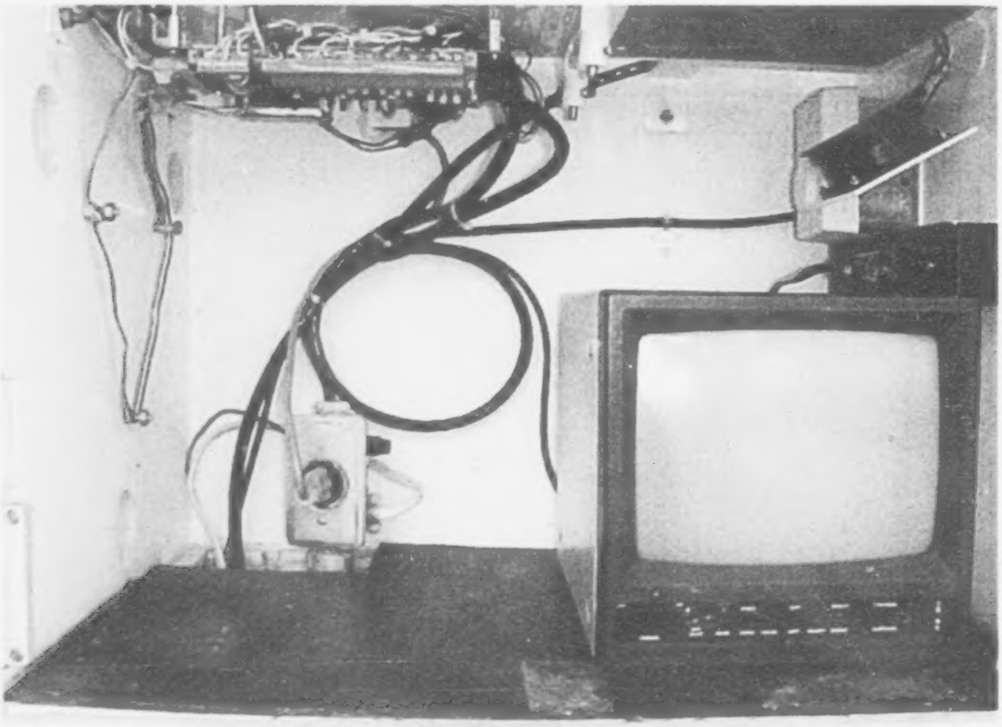


Figure 10 Camera housing – bottom part

Poles

Many of the problems related to camera alignment are the result of movement and vibrations. One of the issues raised by CCTC is that the poles move. DTI, however, did not observe such movement. Figures 11 to 13 show no cracks at the base of these poles, which are anchored in concrete.

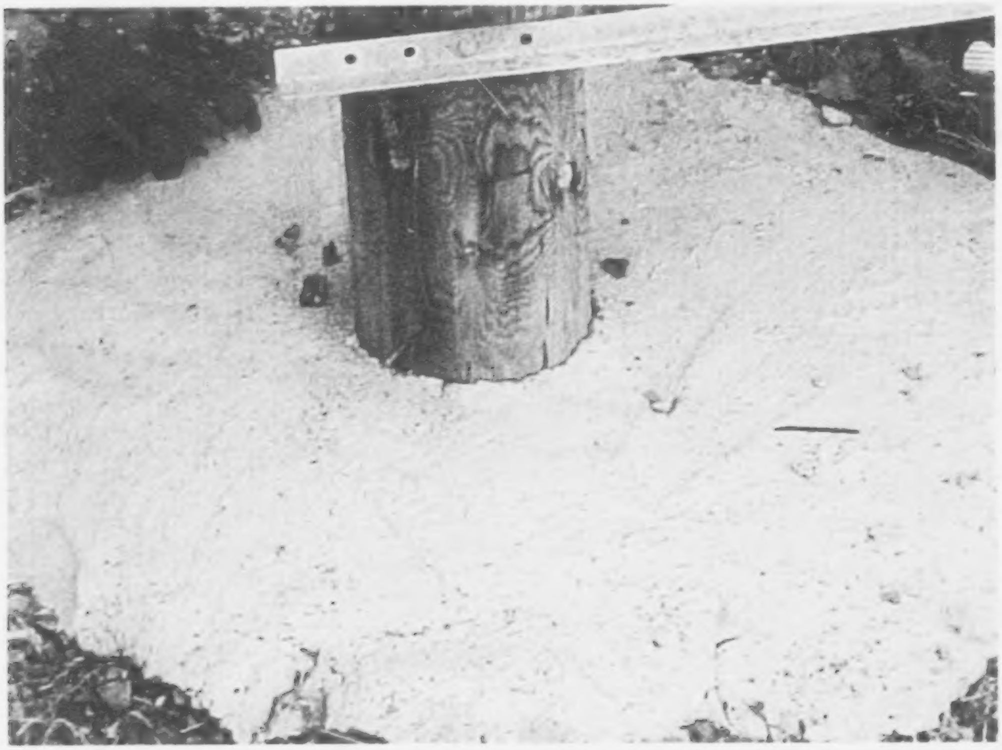


Figure 11 Pole – view #1

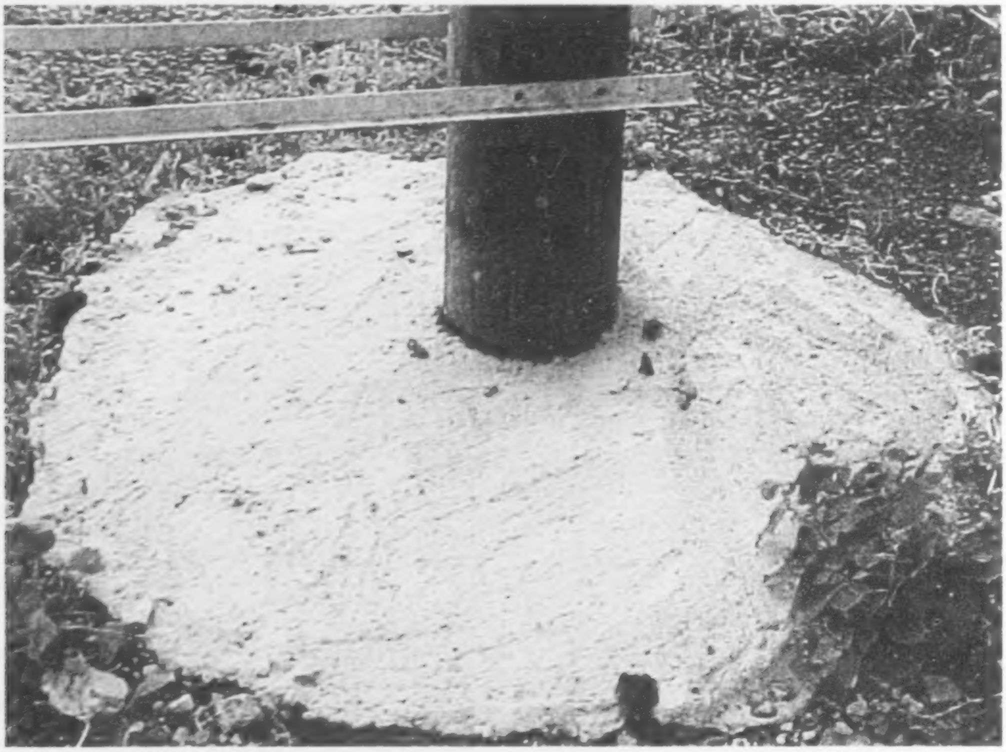


Figure 12 Pole – view #2

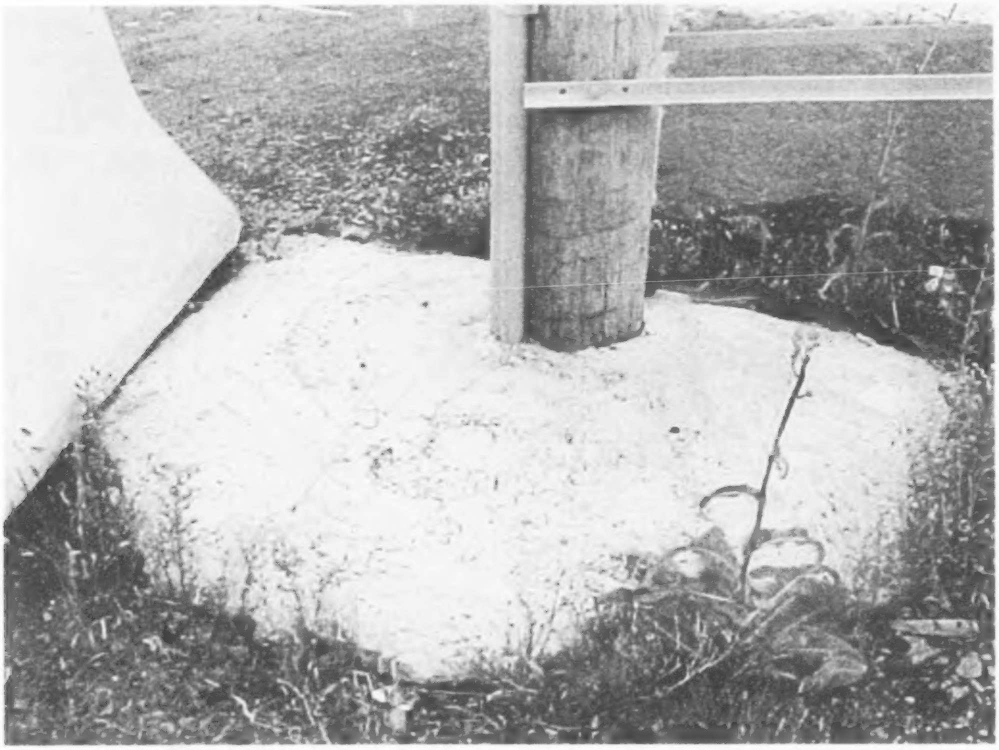


Figure 13 Pole – view #3

However, because the poles are very high, a movement at the top of the poles is possible. Several factors could cause this movement. First, since the site is on the waterfront, it is particularly exposed to strong winds. Second, passing trains cause vibrations – the larger the train, the greater the vibration. Finally, over time, a slight, perceptible shifting of the equipment could occur.

This movement causes the post to vibrate, which automatically displaces the camera pod. The camera eventually becomes misaligned and ends up in the wrong axis. The movement of the housings can also result in loosening the fastening mechanism.

DTI concludes that these installations require a complete overhaul to correct these deficiencies.

6.1.2 Lighting systems

The AEI/OCR system uses three types of lights:

> Spotlights: a series of 13 lights located on each side of the rails to light the train. These lights provide uniform illumination for the cameras to capture images.
>
> OCR reference lights: two lights on each side of the track that are used to segment the container groups during OCR processing. These lights must be aligned in the axis of the camera used for the OCR program to detect the presence of a container and to detect the beginning and end of discrete images.
>
> Calibration lights: one light on each side, also located in the camera axis below the camera image. These lights are used as a calibration target to control the gain of the camera on the opposite side, as well as to detect the ambient luminosity allowing images of constant clarity to be obtained by day and in the evening.

All lights are key components for the efficient operation of the AEI/OCR system.

DTI observed that the lighting systems have several weaknesses. Given that CCTC came once a week during the tests to adjust certain lights, changes should be made to the current configuration so that it is more reliable and requires fewer regular adjustments.

Spotlights

Two posts are installed at a specific distance from the rails. Each post holds two series of six spotlights and one additional spotlight below. Each light is important because each is responsible for a portion of the image. The failure of a single light can prevent exact recognition of the container code.

Figures 14 and 15 show the series of lights installed on each side of the track.

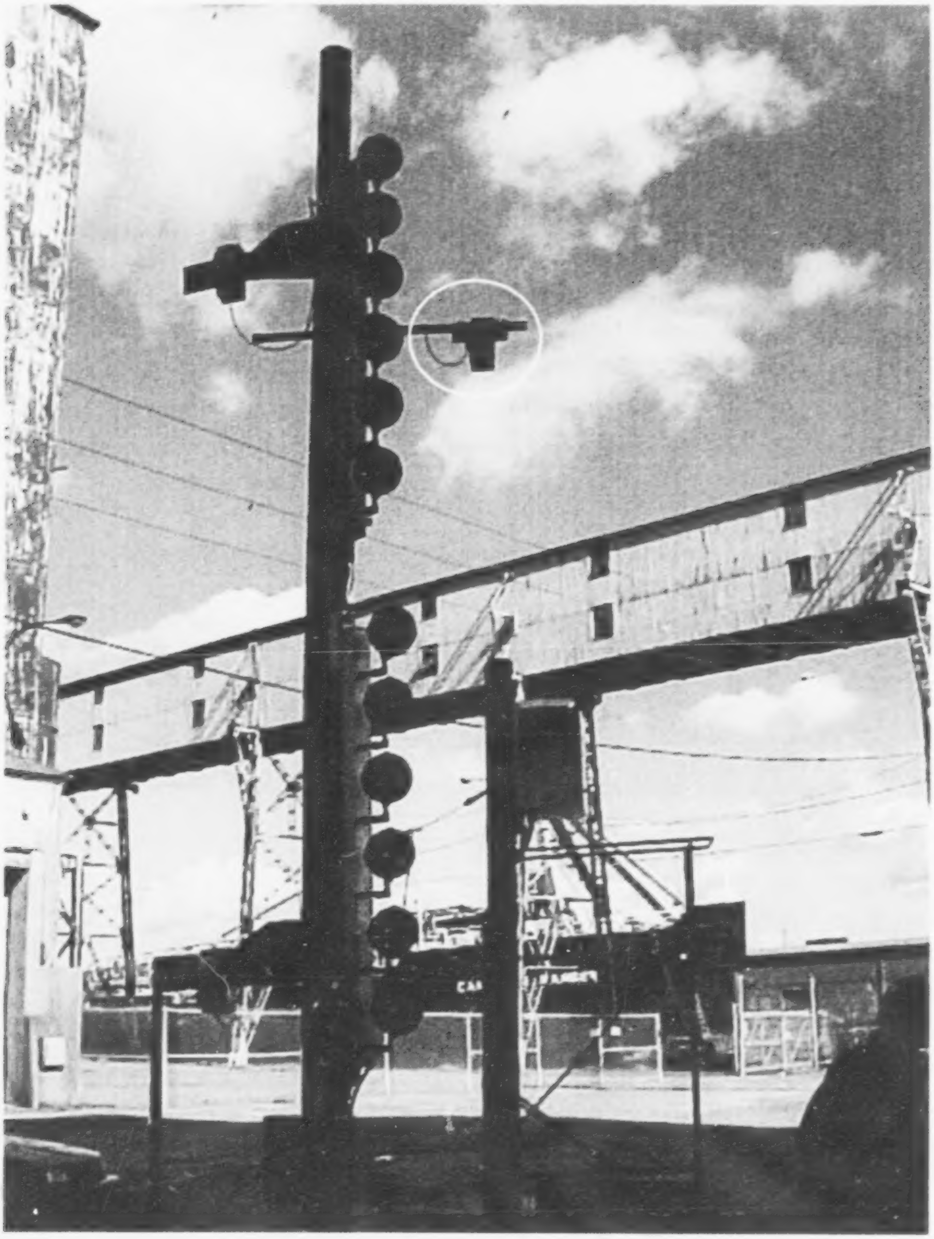


Figure 14 Light systems – view from camera 1 side

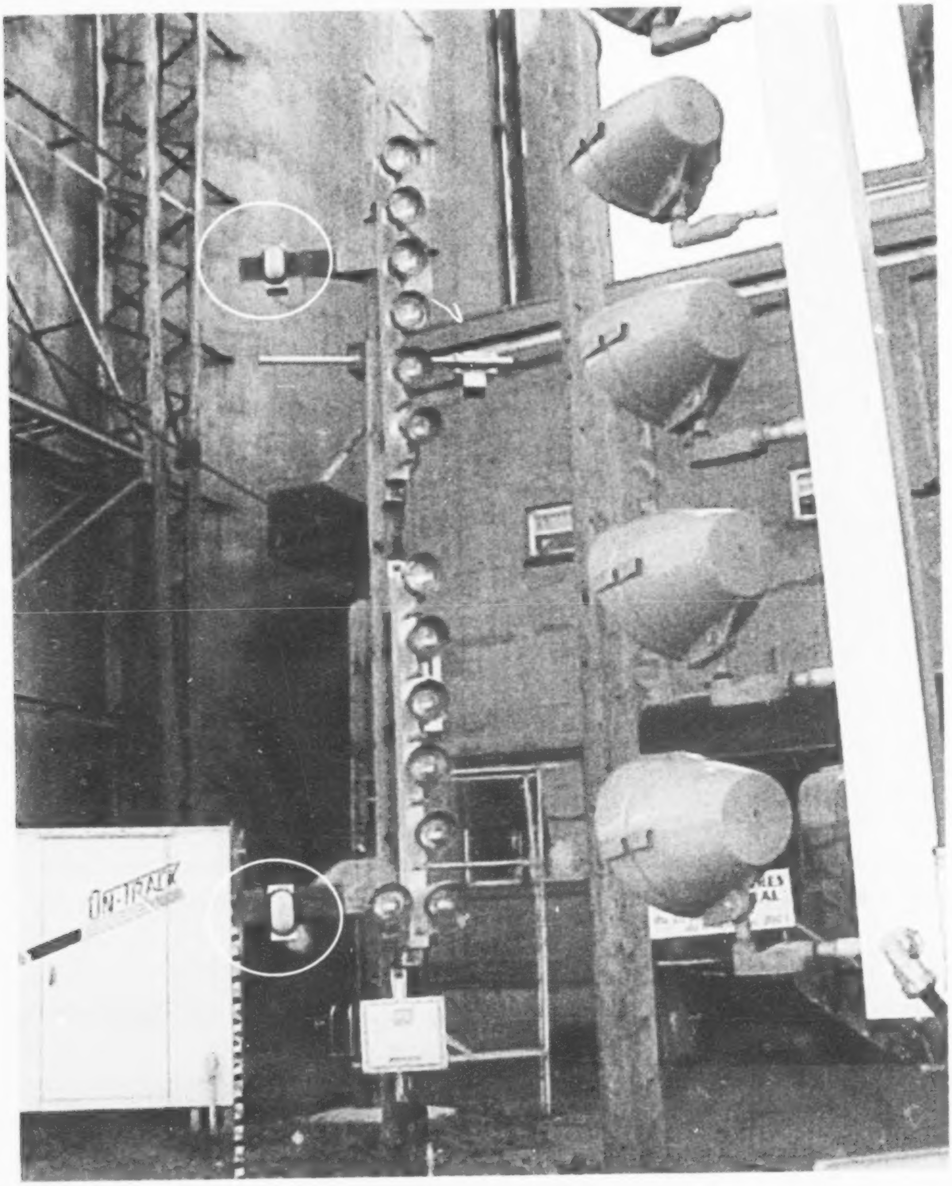


Figure 15 Light systems – view from camera 2 side

DTI noted that the system's spotlights are not fastened securely to their supports. As Figures 16 and 17 clearly show, they can be displaced very easily, thus becoming non-functional.

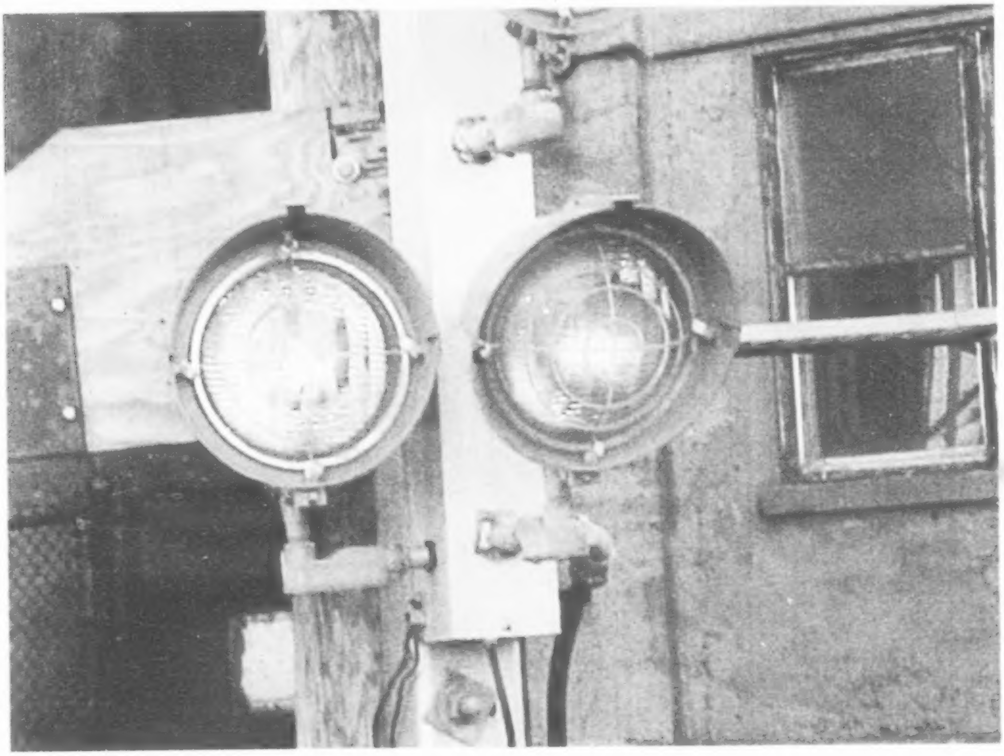


Figure 16 Spotlights (in position)

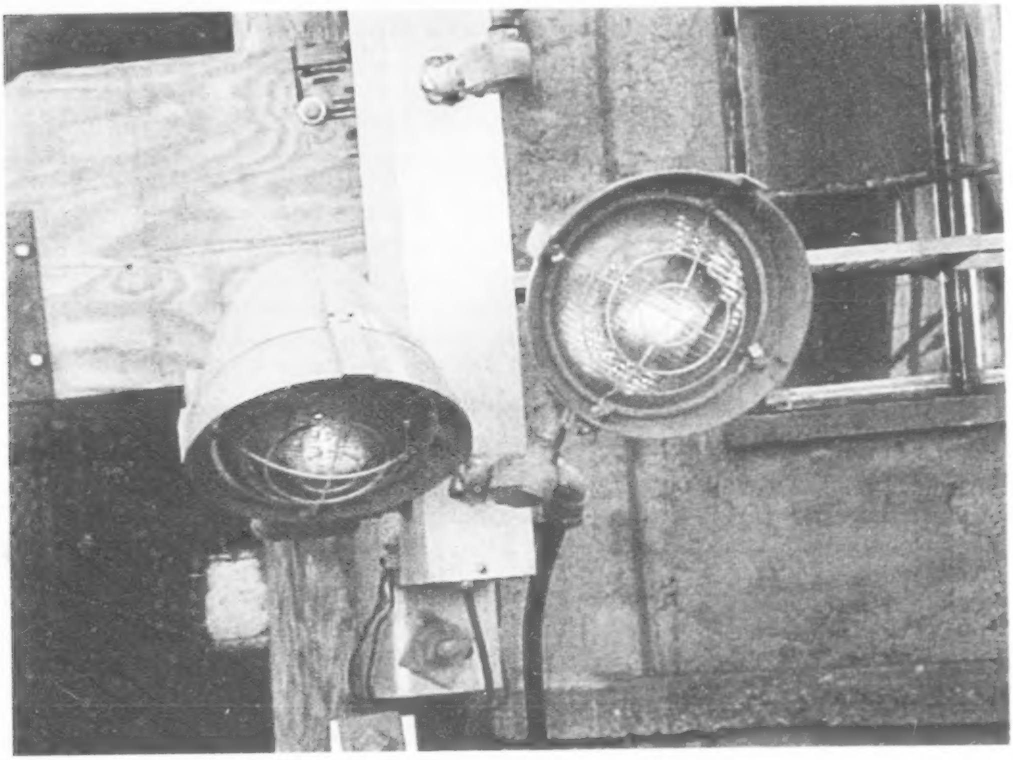


Figure 17 Spotlights (displaced)

A better adjustment and anchoring system could be used for these lights. DTI recommends that an alternative be considered, because the current arrangement is unreliable. The quality of this lighting has a direct influence on the quality of the images and the rate of character recognition by the OCR system.

OCR reference lights

These lights were added after initial installation, to help the OCR system detect the presence of containers and the beginning and end of discrete images. There are two lights on each side of the rails, positioned in the camera axis. One light is at the bottom, one at the top; one detects the presence of containers on a platform, the other detects superimposed containers. These lights are circled in Figure 14.

On the images, these lights look like two continuous white lines when there is only an empty platform. To ensure the OCR system's performance, none of these lights should be burned out and all must be in the line of the camera axis.

Although these lights are securely fastened, they are small. The lights are 4½ inches wide and should be well centered to ensure the OCR system's maximum performance. DTI believes that a new method of identifying the beginning and end of a container should be considered, or that the dimensions and efficiency of these lights should be increased.

Observation showed that the reference beam alignment is crucial for the OCR engine. If the reference lights do not function properly the container segmentation process is impaired. The definitive solution is to implement light beams to help segment the groups of containers. This would also eliminate any difference in processing between night trains and day trains.

Calibration lights

A calibration light is positioned on the pole above the line scan cameras at the top of the image camera located on each side of the rails. These lights are used to align the camera to ensure that the reference lighting for the lens is constant. These lights must also be well centered in line with the camera axes. The window is not very big and this light has an enormous impact on the clarity of the images captured. The light is circled in Figure 15.

The perfect alignment of the calibration lights is very difficult to achieve and seems to be more problematic for camera 1 because of the sky background on the image when the camera is adjusted.

Only one rheostat (or dimmer) is used to adjust the brightness of these lights. One rheostat per light would be desirable. This is an efficient mechanism when the overall structure is stable. But in the current installation the camera often loses the focus of this light.

DTI recommends the development, with CCTC, of a more efficient/reliable solution.

Conclusion

DTI concludes that a complete review of all the lighting system components and their functions is necessary. Complaints from locomotive engineers with regard to the brightness of the spotlights also need to be addressed.

6.1.3 Electrical installations

The AEI/OCR system and associated electrical circuit includes several troublesome electric components. Those that drew attention during the acceptance tests – the Solid State Relays (SSRs) and the breakers – are described in this section.

. ***Solid State Relays (SSRs)***

Additions were made to the electrical installation as the system was developed at the Port of Montreal and as tests were conducted by INO and CCTC.

The first problem arose with an SSR. During the light adjustments on August 27, a fault (Light POD 1) resulted in the lights controlled by this SSR to always stay ON. CCTC transferred the connections of this SSR to another existing one, hoping to correct the problem until a replacement was installed (foreseen for the following morning). Two days later, CCTC came to replace the faulty 25A SSR with a 45A SSR. In the meantime, the interim SSR's breaker was overloaded and switched to the OFF position while a train over 150 feet long was passing. This switched off certain spotlights, including the two lights serving to adjust the camera lens opening, which explains the overexposed images on these two days.

The new standard established by CCTC concerning SSRs is the installation of SSR 45A instead of 25A. The replacement of all 25A SSRs with 45A SSRs before the next use should be considered. During the test period, two SSR failures were observed. The current installation includes two 45A SSRs and six 25A SSRs, including one defective SSR (Light POD 4). Improvements are necessary before use on a regular operating basis.

Breakers

The distribution of lights on each breaker is not optimal. When one of them is OFF because of overload, the cameras and/or OCR interpretation are often affected.

Table 23 presents a summary of the current situation.

Table 23 Breakers (current situation)

Breaker Number	Actual Situation
1-3	Bottom spotlights – Camera 1 OCR reference lights– Camera 2
2-4	Bottom spotlights – Camera 2 OCR reference lights – Camera 1
5-7	Top spotlights – Camera 2 Calibration lights – Cameras 1 and 2
6-8	Top spotlights – Camera 1

It is important to note that the spotlights illuminating containers on the camera 2 side are not top and bottom but mixed on both sets of breakers. In case of a defect, the entire image is affected. As noted, the image processing of the two cameras is often affected during a failure. This situation is far from ideal in a real operating environment.

Table 24 suggests a more balanced distribution of the breakers.

Table 24 Breakers (proposed distribution)

Breaker Number	Recommended Situation
1-3	7 bottom spotlights - Camera 1 Bottom OCR reference light– Camera 1
2-4	7 bottom spotlights – Camera 2 Bottom OCR reference light – Camera 2
5-7	6 top spotlights – Camera 2 Top OCR reference light – Camera 2
6-8	6 top spotlights – Camera 1 Top OCR reference light – Camera 1
X	Calibration lights – Cameras 1 and 2

A malfunction of any breaker can have a major impact on image capture. A better electric configuration for lights and spotlights is required. The addition of a breaker is suggested to isolate the reference lights used for camera luminosity.

It is essential that the SSRs follow an appropriate connection logic. Table 25 gives an example for the camera 1 side:

Table 25 SSR distribution – example camera 1

Breaker Number	SSR	Recommended Situation
1-3	1	4 spotlights from the ground - Camera 1
	2	3 other spotlights - Camera 1 + Bottom OCR reference light – Camera 1
6-8	7	3 spotlights from the ground – Camera 1
	8	3 other spotlights – Camera 1 + Top OCR reference light – Camera 1
X	9	Calibration light – Camera 1

Currently a minor failure can prevent the OCR application from operating properly and, in certain cases, from producing any results at all, as was observed during the acceptance tests. The suggested changes should reduce the impact of a minor failure of an electrical circuit component on the OCR system.

6.1.4 Motion/speed detection system

The wheel and speed detection sensors installed on the site have two main functions: to detect passing trains (the two sensors at the ends) and to detect train speed and direction (the central sensor). The cameras adjust their image capture based on the calculated speed. If the sensor responsible for calculating the speed is broken, there is a risk that the cameras will capture blurred or even distorted images.

Figures 18 to 22 show the location of each sensor installed on the site.

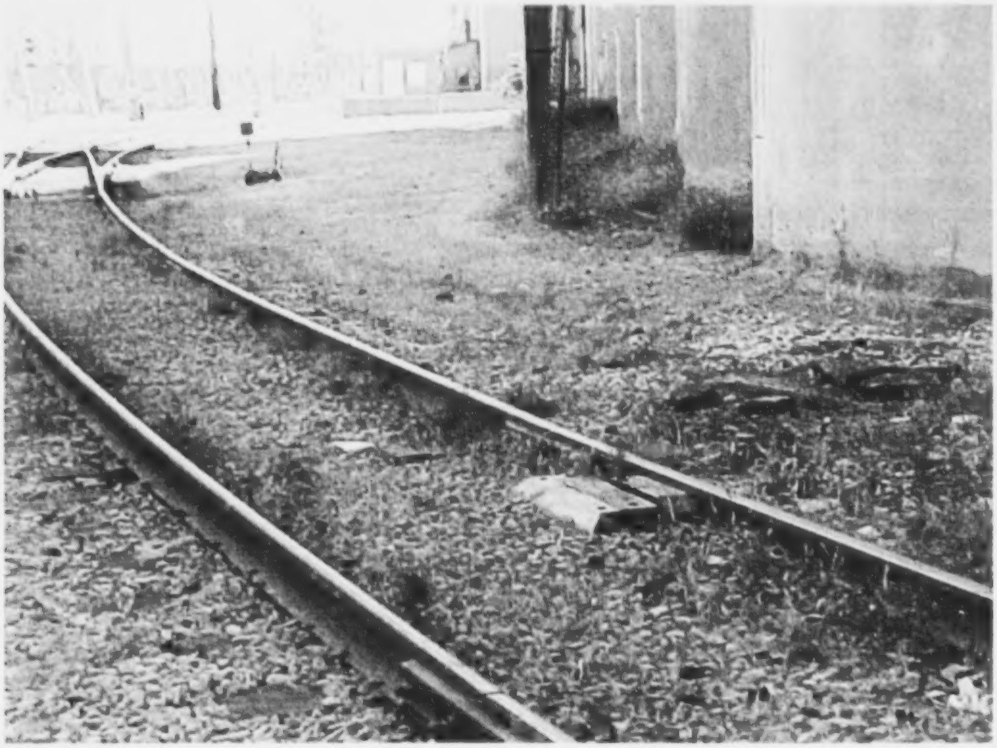


Figure 18 Westbound wheel sensor

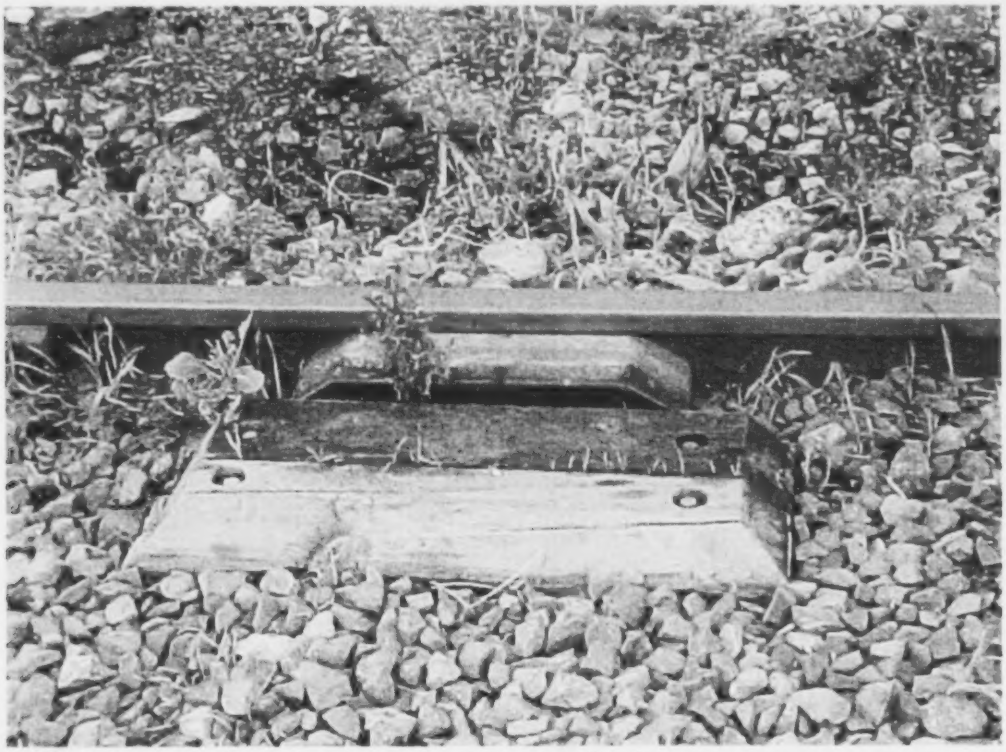


Figure 19 Close-up of the wheel sensor with protective bar

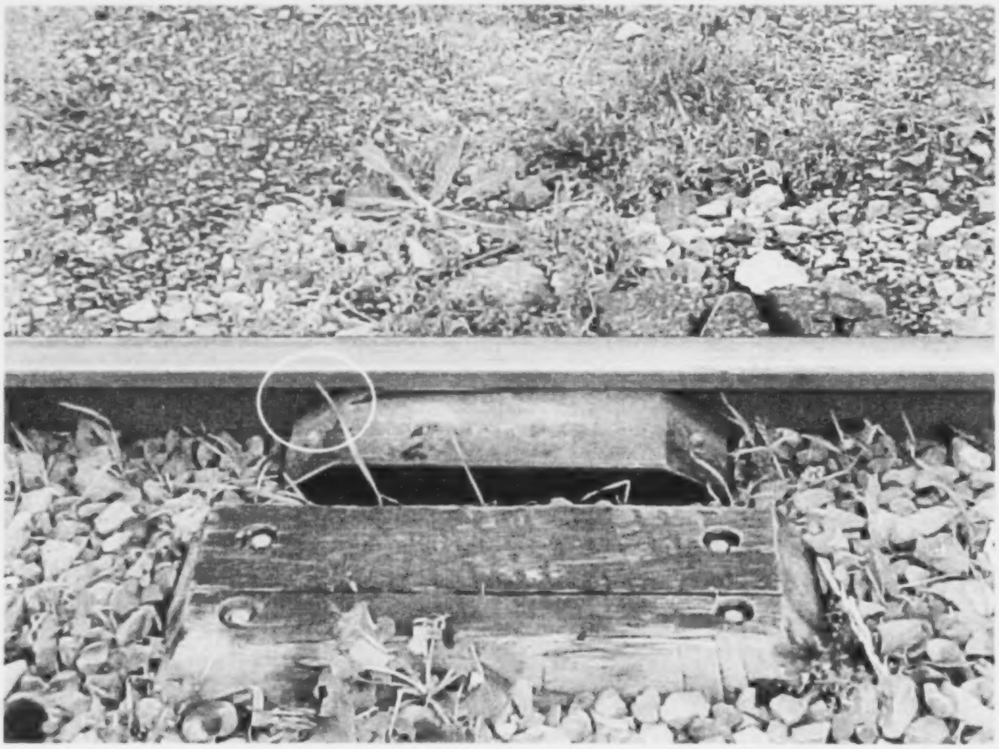


Figure 20 Speed sensor with damaged housing

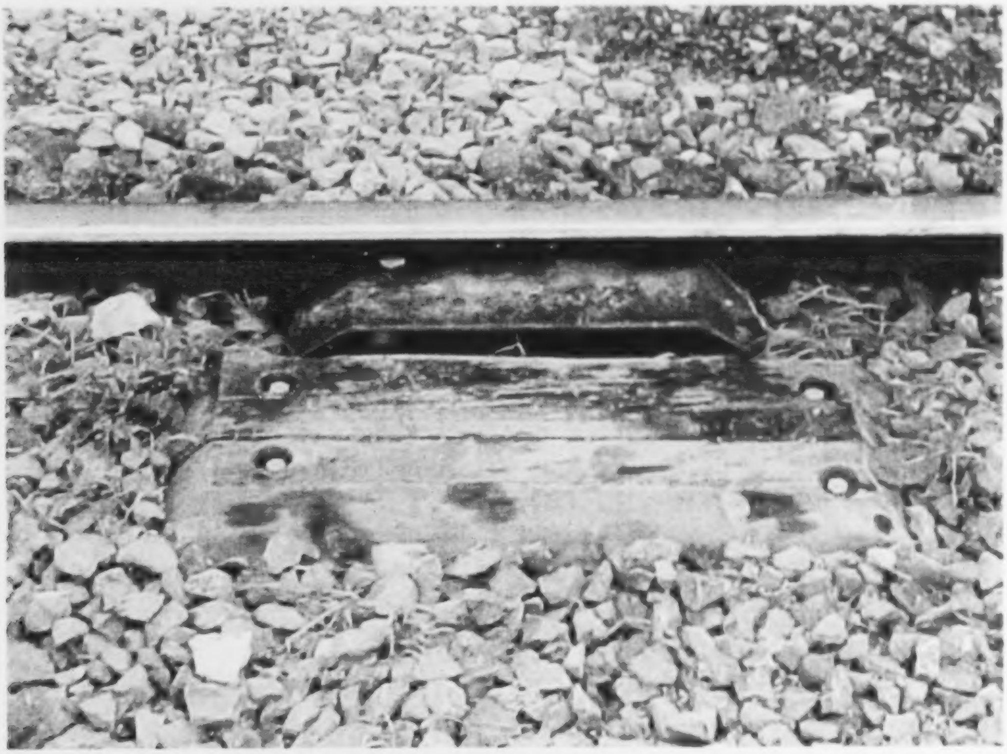


Figure 21 Eastbound wheel sensor

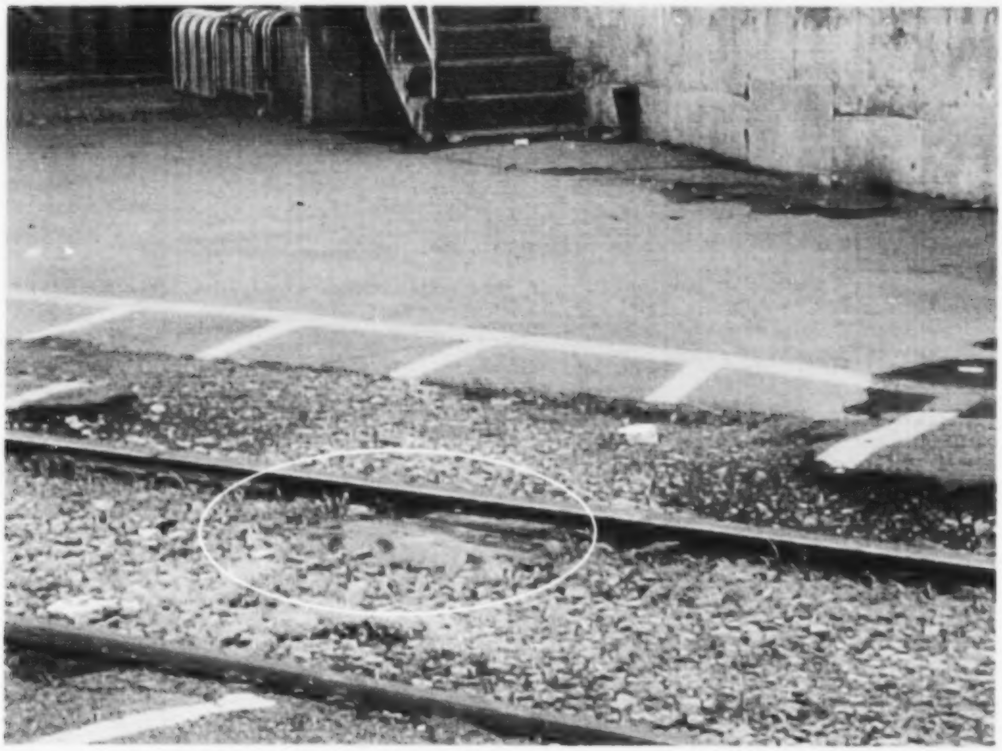


Figure 22 Eastbound wheel sensor located near Mosaïcultures coordinating centre

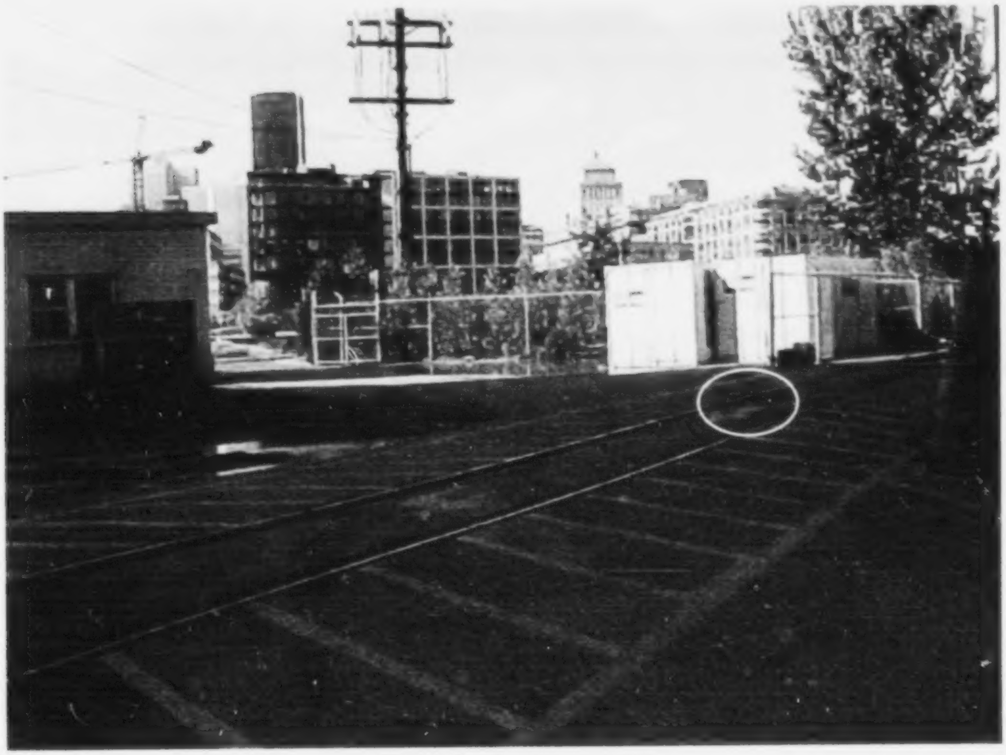


Figure 23 Location where the eastbound wheel sensor should have been installed

In principle, the two train presence sensors should have been installed equidistant from the speed sensor, which is not the case. The westbound sensor was installed 1,050 inches from the speed sensor while the eastbound sensor was installed closer (458 inches). DTI believes that this was done to avoid the risk of damage from passing vehicles, but the problem occurred nonetheless. Since the Mosaïcultures exhibition was being held nearby, its employees were driving on the site with 4x4 vehicles, most of the time in the area where the sensor is located.

The sensor housings were protected by protective bars, but DTI observed that the sensors were damaged anyway, probably by the 4x4 vehicles frequently driving over the eastbound sensor.

DTI noted that these sensors are very sensitive. Fourteen invalid trains were detected during the two weeks of acceptance tests, representing 12.39% of all moves detected. Since the sensors detect metal, the movement of the 4x4 vehicles could generate invalid move detection.

Also, mere contact with steel-toed work boots can cause invalid detection. On a few occasions, DTI provoked invalid moves with a metal bar. This matter should be studied more thoroughly.

6.1.5 Bungalow

The size of the bungalow on the site is relatively small for the equipment it contains. It houses two racks, on which six computers, two screens, and a few keyboards and mouse units are installed (see Figure 24). The bungalow also contains some electrical panels.

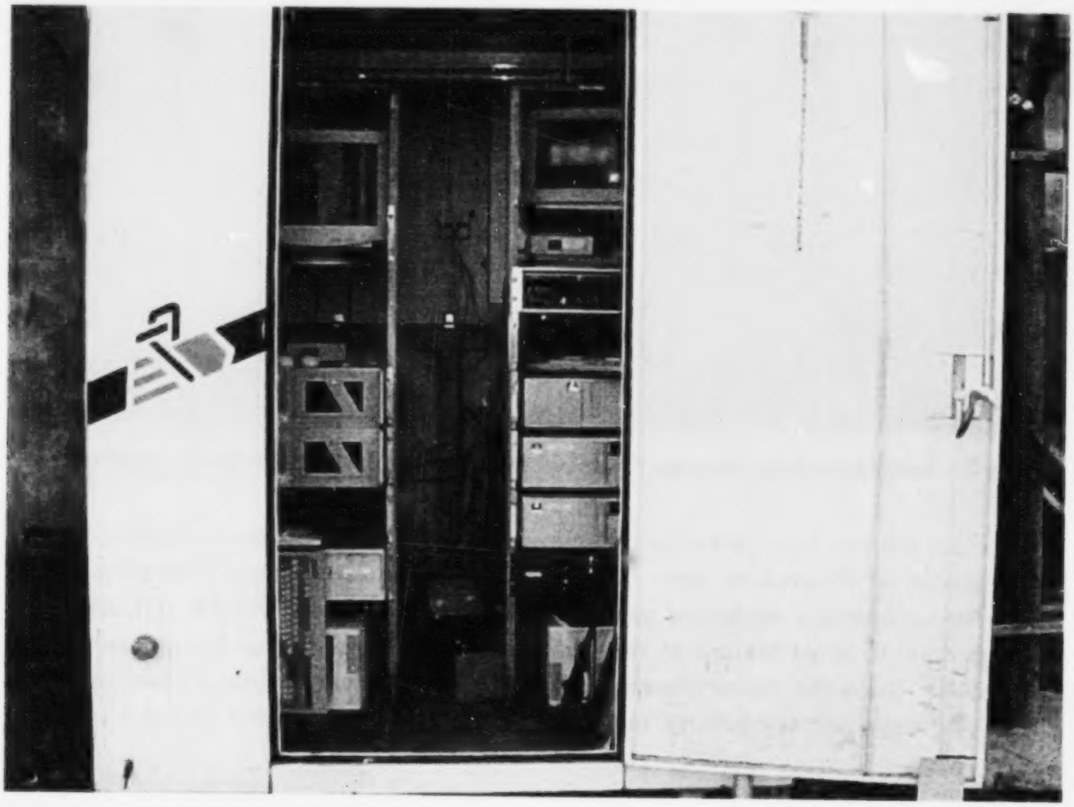


Figure 24 Bungalow – front view

It is difficult for two people to enter the bungalow simultaneously. Access to the equipment in the rear is very limited and the equipment is difficult to work on. During site visits, the door was left open constantly to obtain more space. Thus there is a risk of weather damage to the installed equipment.

DTI recommends installation of a bigger bungalow to provide adequate workspace and easier access to the equipment. According to CCTC, bigger bungalows are available.

6.1.6 Computer equipment

The AEI/OCR system includes a total of six computers, which interact together. Following the improvements made by DTI, the two CoRAIL computers (2 and 3) now run on Microsoft Windows 2000 Pro. The other four computers are not powerful enough to accommodate a Windows 2000 Pro operating system. They therefore run on MS Windows 98.

Table 26 outlines the current and proposed operating systems.

Table 26 Computer configuration – operating system (OS)

Computer	Current OS	Recommended OS
LICO1	MS Windows 98	MS Windows 2000 Pro
LICO2	MS Windows 98	MS Windows 2000 Pro
CoRAIL2	MS Windows 2000 Pro	MS Windows 2000 Pro
CoRAIL3	MS Windows 2000 Pro	MS Windows 2000 Pro
AEI	MS Windows 98	MS Windows 2000 Pro
INFORMATIQUE	MS Windows 98	----

It will not be necessary to change the operating system of the AEI site computer because DTI recommends the elimination of this platform (see Section 6.2.6). It would be desirable to migrate the AEI, LICO1, and LICO2 programs to a Microsoft Windows 2000 Pro operating system to increase the system's stability and ensure compatibility among the five computers,

This necessarily involves changing four of the current system's computers. The minimum hardware configuration to run a computer on MS Windows 2000 Pro requires a Pentium III processor at 450 MHz, 128 MB of RAM, and a 4 GB hard drive.

Switch boxes

The six computers are connected to two keyboard-screen switch boxes, which each control one screen and one keyboard. The computers are divided as follows: on one side are the CoRAIL units on one switch box; on the other are the LICO units and the AEI, all connected to another switch box. The INFORMATIQUE computer has its own keyboard but operates with the screen on the switch box. Table 27 and Figure 25 describe the current configuration.

Table 27 Current configuration of the switch boxes

SWITCH 1		SWITCH 2	
A	CoRAIL3	A	LICO1
B	CoRAIL2	B	LICO2
C	Informatique	C	AEI
D	EMPTY	D	EMPTY

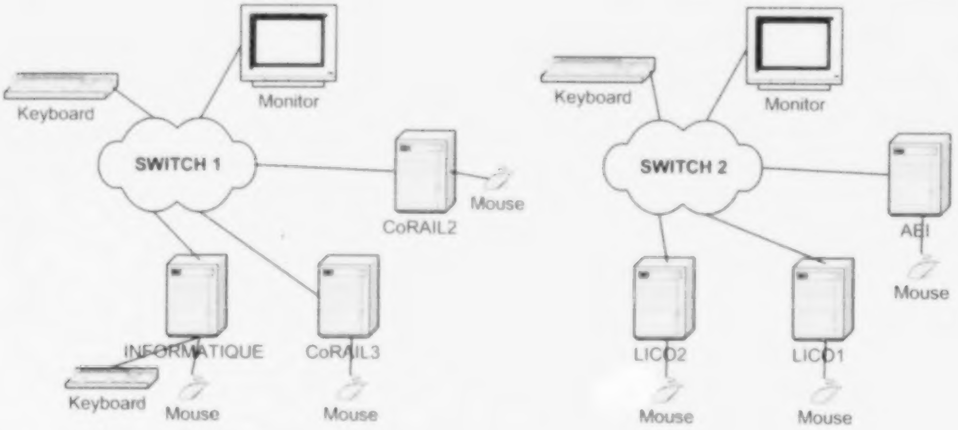

Keyboard
Monitor
SWITCH 1
CoRAIL2
Mouse
INFORMATIQUE
CoRAIL3
Keyboard
Mouse
Mouse
Keyboard
Monitor
SWITCH 2
AEI
Mouse
LICO2
LICO1
Mouse
Mouse

Figure 25 Switch boxes – distribution plan

DTI noted two problems with the existing switch boxes. First, the mouse of each computer is not connected to them. This means that three mouse units are on each rack, which causes confusion. Second, the switch boxes are manual, which means that when a computer is rebooted, the switch box must be positioned on this computer, otherwise the keyboard will not be detected automatically. The ideal configuration would be as follows: one automatic switch box for each rack, to which the following components would be connected: one screen, one keyboard, and one mouse for each of the three computers that would use the switch box. Table 28 and Figure 26 outline this configuration. Space would then be freed and management of the computers would be simplified. To allow this configuration, the purchase of two new automatic switch boxes is recommended. As a suggestion, StarTech (www.startech.com) offers an automatic switch box model that allows connection of up to four computers, one screen, one keyboard, and one mouse. The documentation for switch model SV401, which sells for under $200, can be found in Appendix A.

Table 28 Proposed switch configuration

SWITCH 1		SWITCH 2	
1	CoRAIL2	1	AEI
2	CoRAIL3	2	LICO1
3	EMPTY	3	LICO2
4	EMPTY	4	EMPTY

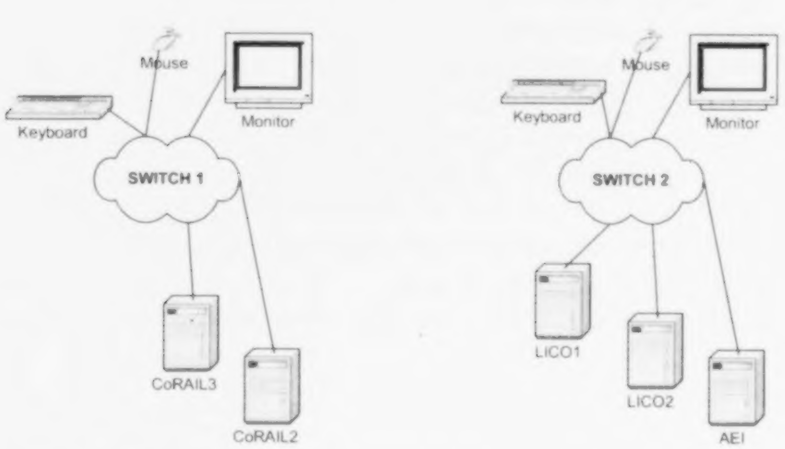

Mouse
Keyboard
Monitor
SWITCH 1
CoRAIL3
CoRAIL2
Mouse
Keyboard
Monitor
SWITCH 2
LICO1
LICO2
AEI

Figure 26 Automatic switch boxes – proposed distribution

Screens

The acceptance tests indicated that the screen resolutions were unstable. Changing one computer for another on the switch box would improve the resolution. DTI recommends the purchase of two 15-inch screens with a minimum resolution of 1024 x 768 pixels.

Cables

DTI observed that the cables in the bungalow, which are also part of the computer hardware, are tangled, which makes it complicated to disconnect and reconnect computers. DTI recommends that the cabling be laid out and attached in a more orderly manner.

Conclusion

DTI considers that several points will have to be reviewed before proceeding with installation of an operational system.

6.1.7 Communication equipment

This section deals with the components of the system's local area network (LAN), since it was not connected to a wide area network (WAN). The network consists of ten 100 Mbps network cards in each computer, a 10/100 Mbps switch, and 100 Mbps cables connecting the network cards to the switch.

Network cards

Each computer has a network card. The two LICOs and the two CoRAILs have a 3COM network card. The AEI computer has an Allied Telesyn network card, which is from the same manufacturer as the network switch, to allow communication among all of the computers.

The link with the Port of Montreal was established by a telephone link between the Port of Montreal's computer (INFORMATIQUE) located in the bungalow near Elevator 5 and the AS/400 located on the Port of Montreal's premises.

The 3COM 10/100 Mbps network cards are very efficient and allowed a mass data transfer rate four times faster than the November 2000 configuration. These results were obtained in CCTC and DTI's lab during preliminary network tests and the details are included in a test report by Mr. Yves Plasse and Mr. Pierre Pageau of CCTC - ADT in September 2001 (*AEI/OCR, Port of Montreal System, Network Testing*).

Cables

The communication cables between the network switch and the LICO and CoRAIL computers were changed to shielded cables tested at 100 Mbps. According to DTI, these cables are more appropriate for this type of environment (Port of Montreal).

Switch

The Allied Telesyn Fast Ethernet 10/100 Mbps switch functioned very well during the laboratory tests and during the acceptance tests at the Port of Montreal.

During these tests, the EDI file was not transmitted to the Port of Montreal's central AS/400 computer. However, in operating mode, this information will have to be transmitted. The Port of Montreal's fiber-optic network could be used as an alternative to the existing TCP/IP dial-up connection. This modification would require a slight change in the network configuration to allow adequate interconnection. This in no way affects the computers' local area network.

Conclusion

The existing LAN is very stable and efficient. The modifications recommended by DTI and implemented with CCTC have proved their reliability and made it possible to achieve data transfer over the network data within 20 minutes. The recommended changes to certain LAN components should be implemented to other network components that were not modified for these tests. These changes would allow the LAN to offer network homogeneity and would ensure efficient integration. An overall WAN solution incorporating a fiber-optic communications network still has to be developed in accordance with the Port of Montreal's specifications, constraints, and requirements.

6.2 Software

6.2.1 Synchronization between the AEI station and the LICO stations

De-synchronization problems between the AEI and LICO programs have occasionally resulted in assigning different move numbers to the container images and the corresponding file. This made it difficult for the OCR program to match the container images. CCTC has proposed a software patch to correct this problem and improve synchronization between the AEI and LICO programs. DTI recommends assigning a unique number simultaneously to both AEI and LICO computers.

6.2.2 Processing of "null" trains

When the AEI wheel sensors detect the presence of a train, the LICO and AEI programs initiate the process of image capture. Conversely, if the train stops and reverses, no associate image files will be generated. To ensure that all moves are correctly identified by the system, a modification is required to the AEI program so that it does not issue an "empty" move notification to the Port.

6.2.3 Upgrading of the AEI and LICO operating system

DTI recommends installing the Microsoft Windows 2000 Pro operating system on the AEI, LICO1 and LICO2 platforms to standardize the operating systems used by the different sub-systems and to optimize the integrated system's general performance. System analysis is a difficult task because too many legacy platforms operate on their own systems. To gain access to a comprehensive set of analysis tools and to ensure better control over the data flow in the system, a move to the Windows Pro operating system for all AEI and LICO stations would be the next logical integration step.

This would complement the work already done in running the OCR application under Windows 2000 Pro. In addition, it would correct the problem observed with the pairing process when one of the two frame grabbers failed. The move to Windows 2000 Pro would provide more stability (manufacturer's opinion) to the frame grabber driver. However, this would have to be verified before implementation and it would still be wise to redesign the pairing process to make it more reliable in case of frame grabber failure and recovery.

6.2.4 Modification to the LICO software to ensure end-of-train detection

To ensure that the OCR program detects an end-of-train (EOT) requires that the LICO program send a specific signal. Each OCR program keeps processing until the EOT condition is met or until there are no new files and a timeout condition is met. The OCR program then generates the OCR files, one for CoRAIL2 and one for CoRAIL3. CoRAIL2 is now finished and falls back into IMG file waiting mode. The CoRAIL stations did not detect or recognize the EOT. DTI believes that a modification to the LICO program is required to correct this situation.

6.2.5 OCR source code documentation and update

TDC is also considering enhancement of the INO OCR Software Design Document (SDD) and the comments in the OCR source code to make the documents easier to maintain and to make them subject to configuration control. The work to document the software design and source code will be done by a third party.

6.2.6 EDI file transfer via a direct link to the Port of Montreal

A modification is required to the AEI software to allow the program to transfer the EDI files directly to the Port of Montreal AS/400 server utilizing the fiber-optic network. This change will reduce the data overhead between the AEI/OCR network and the Port of Montreal communication server. The serial SLIP TCP/IP dial-up connection between the AEI and the POM AS/400 platform should be replaced by a direct connection between the AEI computer and the Port's network server.

7 CONCLUSION

The main objective of this project was to improve the performance of the AEI/OCR system processing time by correcting the deficiencies observed in the data transfer rates on the local area network. This objective was achieved, since 96.7% of the moves observed (89/92) met the required processing time threshold of within 20 minutes. However, the acceptance tests and subsequent analysis of the results revealed a number of software, infrastructure, and equipment deficiencies in the current system configuration.

The network software and hardware improvements and the equipment improvements required are described in detail in Section 6. The following is a brief summary:

- Upgrade the AEI and LICO platforms to a Windows-based network.
- Ensure synchronization between AEI and LICO programs
- Resolve end-of-train detection problem
- Resolve activation of wheel sensors leading to "empty" train processing
- Provide a direct link for data transfer between the AEI/OCR network and the Port of Montreal computer
- Upgrade the physical installation, including the size of the bungalow
- Install an alarm and monitoring system
- Provide more secure attachments for cameras and lights
- Provide for better control and adjustment of the cameras
- Replace the OCR reference lights with light beams

To improve the performance of the system, a complete revision of the physical infrastructure is required to turn the prototype AEI/OCR system into an operational one available on a 24x7 basis. Although the system's network components have been examined and updated, other hardware components need to be reviewed before proceeding with implementation of an operational system. Finally, some corrections and/or revisions will also have to be made to the AEI program to improve its stability and performance in this application.

DTI was able to improve the overall network processing time of the AEI/OCR system by correcting deficiencies observed in the data transfer rates on the local area network. However, during the acceptance tests and the subsequent analysis of the test results, it was evident that the system installation had significantly degraded and this affected the results obtained. This report identifies a number of equipment, hardware, and software deficiencies that need to be corrected before moving to an operational system.

The current single-track AEI/OCR system is still considered a prototype. With the infrastructure, equipment, software, and hardware improvements suggested, this system could become operational. The testing carried out by DTI has demonstrated the potential performance capability of the AEI/OCR system. It was proven that under optimal conditions the system can achieve accuracy in excess of 80% and transfer data within the specified time delay.

DTI also investigated the feasibility of transferring the single-track installation to a double-track site. This requires the existing track layout to be rearranged, i.e., the tracks separated. A possible future double-track location at another site in the Port of Montreal is under investigation by the Port Authority. DTI examined several existing locations but none lends itself to immediate implementation without extensive track work.

A number of issues need to be resolved prior to the installation of an operational double-track system. The main issues are:

the additional clearance required by the new camera lenses (25 mm) suggested by CCTC (29 feet);
the space required for the installation of twin AEI/OCR systems comprising lighting systems, bungalow, and equipment needed for a double-track system;
system installation requirements (system equipment and constraints imposed by the railroads).

The prototype AEI/OCR system has the potential for an operational system and additional resources should be invested to achieve the objectives set at the start of this project.

APPENDIX A

Keyboard/Mouse/Monitor Sharing Switch

STARVIEW

Keyboard/Mouse/Monitor Sharing Switch

STARVIEW
STARVIEW

Installation Manual

SV201
SV401

The Professionals' Online Source For Hard-To-Find Computer Parts
StarTech.com

Overview

The StarView SV401 & SV201 KVM Switches are a control unit that allows access to multiple PC systems (4 PCs for SV201, 2 PCs for SV201) from a single console (keyboard, monitor and mouse). With the SV401/SV201 you can easily access multiple computers in a cost effective manner.

The StarView SV401/SV201 provides two convenient methods to access the PCs connected to the system: using the push button selection switch located on the units right side; and entering hot key combinations from the keyboard. Set up is fast and easy; plugging cables into their appropriate ports is all that is entailed. There is no software to configure, no installation routines, and no incompatibility problems.

There is no better way to save time and money than with a SV401/SV201 installation. By allowing a single console to manage all of the attached PCs, the SV401/SV201 eliminates the expense of purchasing a separate keyboard, mouse and monitor for each PC. Additionally, it saves all the extra space they would take up, and eliminates the inconvenience and wasted effort involved in constantly having to move from one PC to another.

Features

- Supports Microsoft Intellimouse, Logitech MouseMan +, FirstMouse+ and IBM Scroll Point Mouse.
- Keyboard and mouse emulation for error free PC booting.
- Caps Lock, Num Lock and Scroll Lock states are saved and restored when switching.
- Supports 1920 x 1440 resolution.
- Easy to install - No software required - Standard cables to connect to all PCs is all it takes, although we do recommend you use StarTech.com's 3-in-1 cables to ensure easier cable management.
- Easy to operate - PC selection via pushbutton switch or hot keys - Auto Scan function to monitor PC operation.
- Compatible with all PC operating platforms.
- LED display for easy status monitoring
- Saves time, space, power and equipment costs.
- Non-powered
- Supports DDC2B (Display Data Channel)
- Hot pluggable

Hardware Requirements

Console

- One VGA, SCGA, or Multisync monitor capable of the highest resolution that you will be using on any PC in the installation.
- One PS/2 mouse.
- One PS/2 style keyboard or AT style keyboard plus keyboard adapter

PC

- A VGA, SVGA, or Multisync card
- A 6-pin mini-DIN (PS/2) port
- Either a 6-pin mini-DIN (PS/2) keyboard port, or a 5-pin DIN (AT style) keyboard port

Cable

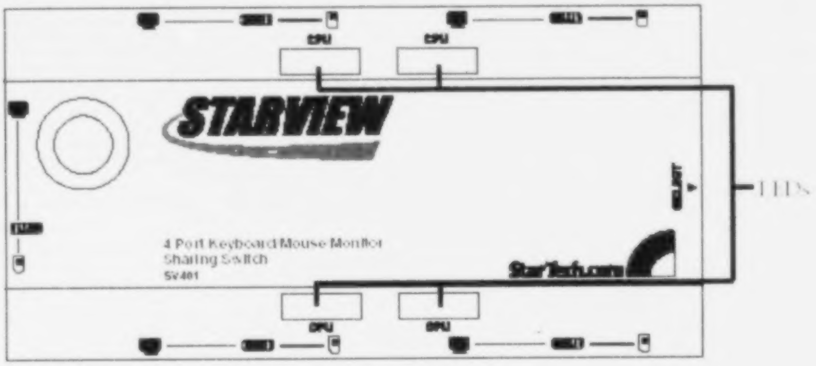
Although it is possible to use standard extender cables to connect the PCs to the SV401/SV201, for optimum signal integrity and to simplify the layout, we strongly recommend that you use our high quality 3-in-1 cables.

**Note: The SV401/SV201 does not support a serial mouse*

Introduction

SV401

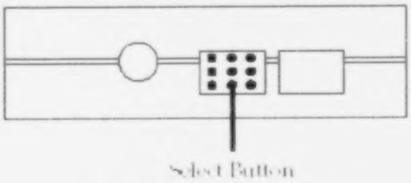
Top View


CPU
CPU
STARVIEW
SELECT
LEDs
4 Port Keyboard/Mouse Monitor
Sharing Switch
SV401
StarTech.com
CPU
CPU

Selected LEDs

Lights to indicate the currently selected port. Depending on the port status, the LED may flash according to a specific pattern (see the Appendix for details).

Right Side View:

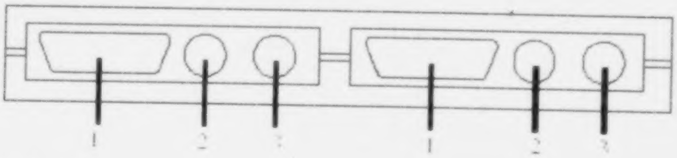

Select Button

Port Selection Button

Pressing this pushbutton switches cycles through the four CPU ports (A ~ B ~ D ~ E ~ A, etc.), to select the active port.

CPU & Console Connectors:

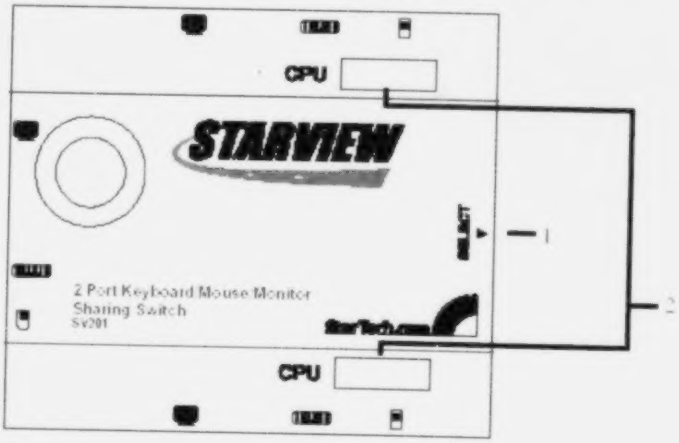
There are three connectors for each of the four CPU ports, as well as for the console. Each connector is indicated by an appropriate icon.



1. Video Connector
2. PS/2 Style Keyboard Connector
3. PS/2 Style Mouse Connector

SV201

Top View


CPU
STARVIEW
SELECT
1
2 Port Keyboard/Mouse Monitor
Sharing Switch
SV201
StarTech.com
2
CPU

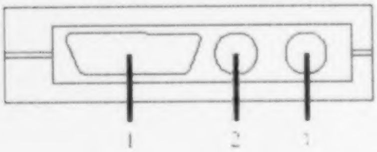
1. Port Selection Button

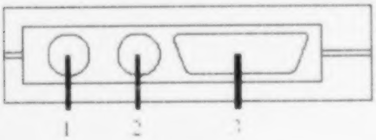
Pressing the selection button allows you to access back and forth between PXs.

2. Selected LEDs

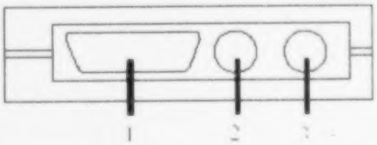
Lights to indicate the current selected port. Depending on the port status, the LED may flash according to a specific pattern (see the Appendix for details).

CPU Port View





1. Video Connector
2. PS/2 Style Keyboard Connector
3. PS/2 Style Mouse Connector



Console View

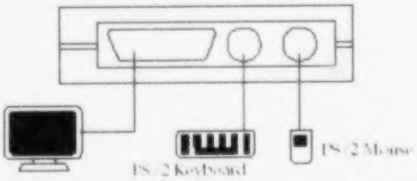
1. Monitor Connector
2. PS/2 Style Keyboard Connector
3. PS/2 Style Mouse Connector

Installation

Before you begin, make sure that all the devices (SV401/SV201 and both PCs) you will be connecting up has been turned off.

1. Plug the monitor, keyboard and mouse into the console port connectors of the SV401/SV201 unit.
2. Use the extender cables (as described in the hardware requirement section) to connect the monitor, keyboard and mouse ports of the PCs to the StarView SV401/SV201 as shown in the diagram below.
3. Turn on the power to the monitor and the connected PCs.

Note: The Power On default for both units (SV401/SV201) is to link to Part A. If the PC attached to Port A is inactive, the monitor will appear as if the unit is not functioning. This is not the case. Simply use one of the port selection methods described below to switch to the active PC on one of the other ports (B, D or E).



Operation

Controlling both PCs in your StarView SV401/SV201 installation from a single console could not be easier. Two port selection methods that provide instant access to either PC are available:

- Manual Port Selection
- Hot Key Port Selection

Manual Port Selection

With manual port selection you can simply press the port selection button on the SV401/SV201's right panel to cycle among the computers (A ~ B ~ D ~ E ~ A etc.). The selected LED on the top panel lights indicates which port is active.

Hot Key Port Selection

Hot key navigation allows you to select the active PC directly from the keyboard, instead of having to manually select it by pushing the port selection button. The SV401/SV201 provides several Hot Key navigation features:

- Selecting the Active Port
- Auto Scan Mode
- Last/Next Mode (SV401

Note: All Hot Key operations begin by pressing and releasing Alt + Ctrl + Shift combination. The combination must all be on the same side of the keyboard (Left Ctrl + Left Alt or Right Ctrl + Right Alt).

Selecting the Active Port

Each CPU port is assigned an alpha ID (CPU A, CPU B, CPU D and CPU E). A port ID number is associated with each letter (see table below). You access the PC attached to a port by specifying the Port ID as part of the Hot Key combination as follows:

SV201

Press and release the Left Ctrl or Right Ctrl key twice.

Note: The combination must be on the same side of the keyboard (Left Ctrl + Left Ctrl or Right Ctrl + Right Ctrl).

SV401

1. Press and release Alt+Ctrl+Shift
2. Key in the appropriate Port ID (1, 2, 3 or 4)
3. Press Enter

The Port ID numbers that correspond to the port letters are as follows:

Port Letter	Port ID Number
A	1
B	2
D	3
E	4

Auto Scan Mode

The StarView SV401/SV201's Auto Scan feature automatically switches among the PCs at regular intervals so that you can monitor their activity without having to take the trouble of switchng yourself. To invoke Auto Scan Mode, key in the following combination:

SV201

Press and release the Left Shift key, the press and release the Right Shift key (Left Shift + Right Shift).

SV401

1. Press and release Alt+Ctrl+Shift
2. Press and release 0 (zero)
3. Press Enter

Once the scanning begins, it continues until you press the space bar to exit Auto Scan Mode. The port that was active at the time scanning stopped remains active.

Note: While Auto Scan Mode is in effect, none of the other keyboard keys will function. You must exit Auto Scan Mode by pressing the Spacebar in order to use the console for anything else.

Last/Next Mode (SV401)

The Last/Next feature is provided to enable you to quickly switch back and forth between computers in order to monitor them manually, instead of using Auto Scan Mode. This method lets you dwell on a particular port for as long or as little as you like, as opposed to Auto Scan Mode, which switches after a fixed interval. To invoke Last/Next Mode, which switches after a fixed interval, key in the following combination:

1. Press and release Alt+Ctrl+Shift
2. Press and release 9
3. Press Enter

Once the Last/Next Mode is active pressing the Left Shift key switches to the previous computer (from the currently active one); pressing the Right Shift key switches to the next computer in the installation.

Note: While Last/Next Mode is in effect, none of the other keyboard keys will function. You must exit Last/Next Mode by pressing the Spacebar in order to use the console for anything else.

Appendix

Selected LED display

Activity	Meaning
Off	Port is not selected.
On (Steady)	Port is connected to an active PC.
Flashing (On and Off Equal)	Port is connected to an active PC and is being accessed by autoscan mode.
Flashing (On Long, Off Short)	Port is being connected to an active PC and is being accessed by Last / Next mode.

Specifications

Computer Connections		4 (2)
Port Selection		Push Button Switch Hot Keys
LEDs		4 (2) Selected
Connectors	Keyboard	1 x 6 pin mini DIN female (PS / 2 style) - Console 4 (2) x 6 pin mini DIN female (PS / 2 style) - CPU Ports
	Mouse	1 x 6 pin mini DIN female (PS / 2 style) - Console 4 (2) x 6 pin mini DIN female (PS / 2 style) - CPU Ports
	Video	1 x HDB-15 female (std. VGA / SVGA) 4 (2) x HDB-15 male (std. VGA / SVGA)
Operating Temperature		5 - 40 deg. C
Storage Temperature		-20 - 40 deg. C
Humidity		0 - 80% RH, Non condensing
Enclosure		Plastic
Weight		250g (190g)
Dimensions (L x W x H)		170 x 87 x 28.5 mm (130 x 100 x 25 mm)

(SV201 in Brackets)

Limited Warranty

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT FROM DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENCIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK OR ITS DOCUMENTATION.

The direct vendor makes no warranty or representation, expressed, implied or statutory with respect to the contents or use of this documentation, and specially disclaims its quality, performance, merchantabilty or fitness for any particular purpose.

The direct vendor also reserves the right to revise or update device or documentation without obligation to notify any individual or entity of such revisions or update. For further inquiries please contact your direct vendor.

Preventing Radio & TV Interference

WARNING!! This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment is a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

APPENDIX B

Detailed Tables of OCR Results (moves with containers)

Legend of the elements of the tables

Date : Date of the move
Move time : Detection time of the train
Move : Sequential move number
Time taken : Duration of the move
Images C1 : Number of images generated with the camera 1
Images C2 : Number of images generated with the camera 2
Visual inspection C1 : Value read during the visual inspection - camera 1 side
Visual inspection C2 : Value read during the visual inspection - camera 2 side
PoM Consist : Returned value to PoM further to the treatment
Code ID – C1 : Value returned by the software - camera 1 side
Code ID – C2 : Value returned by the software - camera 2 side
PoM match : Result - value returned to PoM (0 = False, 1 = True)
Code ID C1 match : Result - value returned for camera 1 side (0 = False, 1 = True)
Code ID C2 match : Result - value returned for camera 2 side (0 = False, 1 = True)
Invalid C1 : Invalid ID code for OCR - camera 1 side (Null = valid, 1 = invalid)
Invalid C2 : Invalid ID code for OCR - camera 2 side (Null = valid, 1 = invalid)
Invalid : Invalid ID code for OCR - both sides (Null = valid, 1 = invalid)
# Image C1 : Corresponding number of image - camera 1 side
# Image C2 : Corresponding number of image - camera 2 side

DTI

Acceptance Tests Form

MOVE 141

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-23	05:02:08	141	00:06:14	242	250

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
PONU 476897 0	PONU 476897 0	PONU 476897 0	PONU 476897 0	PONU 476897 0	1	1	1					11
MWCU 600674 2	MWCU 600674 2	MWCU 600674 2	MWCU 600074 2	MWCU 600674 2	1	0	1				17	15
CMGU 000888 7	CNGU 000888 7	JICU 000888 7		JICU 000888 7	0	0	0	1	1	1	17	17
GCEU 665862 8	GCEU 665862 8	GCEU 665862 8		GCEU 665862 8	1	0	1				21	19
PONU 473714 1	PONU 473714 1	PONU 473971 4	PONU 473+71 4	PONU 473+71 4	0	0	0				21	19
HLCU 411466 7	HLCU 411466 7	HLCU 411466 7	HLCU 411466 %	HLCU 411466 7	1	0	1				26	24
HLXU 604600 0	HLXU 604600 0	HLXU 604600 0	HLXU 604600 0	HLXU 604600 0	1	1	1				26	24
HLXU 616813 8	HLXU 616813 8				0	0	0				30	28
HLCU 409221 2	HLCU 409221 2				0	0	0				30	28
GATU 814381 4	GATU 814381 4	GATU 814381 4	GATU 814381 4	GATU 814381 1	1	1	0				35	32
HLXU 456735 5	HLXU 456735 5	HLXU 456735 5	HLXU 456735 5	HLXU 456735 5	1	1	1				35	32
PONU 083988 6	PONU 083988 6	PONU 083988 6	POMU 083988 6	PONU 083988 6	1	0	1				37	36
POCU 012544 2	POCU 012544 2	POCU 012544 2	POCU 012544 2	POCU 012544 2	1	1	1				39	38
TRIU 906820 0	TRIU 906820 0	TRIU 906820 0	TRIU 906820 0	TRIU 018820 5	1	1	0		1		43	41
TRIU 968505 3	TRIU 968505 3	TRIU 968505 3	TRIU 968505 3	TRIU 968505 3	1	1	1				43	41
ITLU 665428 8	ITLU 665428 8	ITLU 665428 8		ITLU 665428 8	1	0	1				46	45
SEAU 855422 9	SEAU 855422 9	SEAU 855422 9	SEAU 855422 1	SEAU 855422 9	1	0	1				47	45
PONU 078493 1	PONU 078493 1	PONU 078493 1	PONU 078493 1		1	1	0				47	46
PONU 148528 3	PONU 148528 3	PONU 148528 3	PONU 148528 1	PONU 148528 3	1	1	1				50	48
TRIU 908841 7	TRIU 908841 7	TRIU 908841 7	IRIU 908841 7	TRIU 908841 7	1	0	1				50	48
PONU 129719 9	PONU 129719 9	PONU 129719 9	PONU 297191 9	PONU 129719 9	1	0	1				53	51
TEXU 494783 5	TEXU 494783 5	TEXU 494783 5	TCXU 494783 5	TEXU 494783 5	1	0	1				53	51
TEXU 552767 3	TEXU 552767 3	TEXU 552767 3	TEXU 552767 3	TLXU 557767 3	1	1	0				56	54
SEAU 821530 7	SEAU 821530 7	SEAU 821530 7	SEAU 821530 7	SEAU 821530 7	1	1	1				56	54
KNLU 501921 0	KNLU 501921 0	KNLU 501921 0	KNLU 501921 0	KNLU 501921 0	1	1	1				59	57
TTNU 474777	TTNU 474777 7	TTNU 474777 7	TTNU 474277 7	TTNU 474777 7	0	0	0	1	1	1	59	57
MAEU 791969 2	MAEU 791969 2	MAEU 791969 2		MAEU 791969 2	1	0	1				62	61
PONU 722212 9	PONU 722212 9	PONU 722212 9	PONU 722212 9	PONU 722212 9	1	1	1				63	61
SCMU 201328 7	SCMU 201328 7				0	0	0				63	62
SCMU 204710 0	SCMU 204710 0	SCMU 204710 0	SCMU 201328 7	SCMU 204710 0	1	0	1				66	65
FSCU 403765 0	FSCU 403765 0	FSCU 403765 0	FSCU 403765 1	FSCU 403765 0	1	0	1				67	65
GLDU 012137 0	GLDU 012137 0	GLDU 012137 0	GLDU 012137 0		1	0	0				67	66
CLHU 252248 0	CLHU 252248 0	CLHU 252248 0		CLHU 252248 0	1	0	1				70	69
PONU 157058 0	PONU 157058 0	PONU 157058 0	PONU 157058 0	PONU 157058 0	1	1	1				71	69
MSKU 207924 7	MSKU 207924 7	MSKU 707924 7	MSKU 707924 7		0	0	0				71	70
PONU 070420 0	PONU 070420 0	PONU 070420 0		PONU 070420 0	1	0	1				74	73
MAEU 719509 3	MAEU 719509 3	MAEU 719509 3	MAEU 719509 3	MAEU 719509 3	1	1	1				75	73
TEXU 369311 9	TEXU 369311 9	TEXU 369311 9	TEXU 369311 9		1	1	0				75	74
TGHU 213454 1	TGHU 213454 1	TGHU 213454 1		TGHU 213454 1	1	0	1				78	78
OCLU 132012 6	OCLU 132012 6	OCLU 132012 6	OCLU 120126 %	OCLU 132012 6	1	0	1				80	78
GATU 052803 9	GATU 052803 9	GATU 052803 9	GATU 052803 9		1	1	0				80	79
KNLU 327236 4	KNLU 327236 4	KNLU 327236 4		KNLU 327236 4	1	0	1				83	82
GLDU 059029 5	GLDU 059079 5	GLDU 059029 5	GLDU 059029 5	GLDU 1590+9 5	0	0	0		1		84	82
ICSU 478404 8	ICSU 478404 8	ICSU 478404 8	ICSU 478454 8		1	1	0				84	83
PONU 068819 9	PONU 068819 9	PONU 068819 9		PONU 068819 9	1	0	1				87	86
PONU 722550 8	PONU 722550 8	PONU 722550 8	PONU 722550 8	PONU 722550 8	1	1	1				88	86
TTNU 293402 0	TTNU 293402 0				0	0	0				88	87
TTNU 285799 7	TTNU 285799 7	TTNU 285797 7	TTNU 285799 %	TTNU 285798 %	0	0	0	1	1	1	92	91
APMU 802234 4	APMU 802234 4	APMU 802234 4	APMU 802234 4	APMU 802234 4	1	1	1				93	91
???G ???0?? 5	GSTU 592011 5	GSTU 592011 5		GSTU 592011 5	1	0	1	1			93	92
TRLU 239211 9	TRLU 239211 9	TRLU 239211 1		TRLU 239211 1	0	0	0				96	95
MSKU 611464 4	MSKU 611464 4	MSKU 611164 4		MSKU 611164 4	0	0	0				97	95
TRLU 261459 8	TRLU 261459 8				0	0	0		1		97	96
MAEU 695642 8	MAEU 695642 8	MAEU 695642 8		MAEU 695642 8	1	0	1				100	99
MAEU 826472 7	MAEU 826472 7	MAEU 826472 7	MAEU 826472 7	MAIU 8-6472 7	1	0	0				101	99
CPIU 893181 0	CPIU 893181 0	CPIU 893181 0	CPIU 893181 0		1	1	0				101	100
SEAU 785262 1	SEAU 785262 1	SEAU 785262 1	SEAU 785262 1		0	0	0				105	103
PONU 738346 3	PONU 738346 3	PONU 738346 3	PONU 738346 3		1	1	0				105	103
PONU 740376 5	PONU 740376 5	PONU 740376 5	PONU 740376 5	PONU 140316 5	1	1	0				109	107
SCMU 430869 3	SCMU 430869 3	SCMU 430869 3	SCMU 430869 3	SCMU 430869 3	1	1	1				109	107
HLXU 613474 0	HLXU 613474 0	HLXU 613474 0	HLXU 613474 0	HLXU 613474 0	1	1	1				114	112
HLXU 426283 9	HLXU 426283 9	HLXU 426283 9	HLXU 426283 9	HLXU 426283 9	1	1	1				117	115
HLCU 415573 2	HLCU 415573 2	HLCU 415573 2	JLCU 511597 3	HLCU 415573 2	1	0	1	1			117	115
HLXU 604998 8	HLXU 604998 8	HLXU 604998 8	HLXU 604998 8	HLXU 604998 8	1	1	1				121	119

DTI

Acceptance Tests Form

MOVE 141

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001.08.23	05:02:06	141	00:06:14	242	250

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2

DTI

Acceptance Tests Form

MOVE 141

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-23	05:02:08	141	00:06:14	242	250

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
HLXU 600401 0	HLXU 600401 0	HLXU 600401 0	HLXU 600401 0	HLXU 600401 0	1	1	1				121	119
HLXU 440712 0	HLXU 440732 0	HLXU 440732 0	HLXU 440732 0	HLXU 440732 0	1	1	1				124	122
HLCU 403260 9	HLCU 403240 9	HLCU 413260 9		HLCU 413260 9	0	0	0				124	122
GLDU 058626 9	GLDU 058626 9	GLDU 058626 9	GLDU 058626 9	GLDU 058626 9	1	0	1	1			132	130
TEXU 458925 9	TEXU 458925 9	TEXU 458925 9	TEXU 458925 9	TEXU 458925 9	1	1	1				132	130
TTNU 952265 8	TTNU 952265 8	TTNU 952265 8	TTNU 952265 8		1	1	0				136	134
PONU 081455 1	PONU 081455 1				0	0	0				138	137
GLDU 065548 3	GLDU 065548 3	CLDU 065548 1	TLDU 065548 3	GLDU 065548 1	0	0	0				141	139
CRXU 421725 0	CRXU 421725 0	CRXU 421725 0	CRXU 421725 0	CRXU 421725 7	1	1	0				145	143
MAEU 830567 8	MAEU 830567 8	MAEU 830567 8	MAEU 830567 8	MAEU 830567 7	1	1	0				149	147
PONU 133172 9	PONU 133172 9	PONU 133172 9	PONU 133172 9	PONU 133172 9	1	1	0		1		153	151
	HLCU 470500 0	HLCU 420500 5		HLCU 420500 5	1	0	1	1				172
	OOLU 361065 9	OOLU 361065 9		OOLU 361065 9	1	0	1	1				172
	HLCU 218002 2				0	0	0	1				173
	KNLU 502096 7	KNLU 502096 7		KNLU 502096 7	0	0	0	1	1	1		177
	MAEU 729870 1	MAEU 729811 1		MAEU 729811 1	0	0	0	1				177
TTNU 421129 4	TTNU 421129 4				0	0	0				176	181
NYKU 655632 0	NYKU 655672 0	NYKU 655632 0	NYKU 655632 0	NYKU 655777 0	1	1	0		1		176	181
MWCU 656942 7	MWCU 656942 7	MWCU 656942 7	MWCU 656942 7	MWCU 656942 7	1	1	1				180	185
NYKU 672013 6	NYKU 672013 6	NYKU 672013 6	NYKU 672013 1	NYKU 672013 1	1	0	0				180	185
SEAU 711038 2	SEAU 711038 2				0	0	0		1		184	189
GYTU 935327 0	GSTU 935322 0	GSTU 935322 0		GSTU 935322 0	1	0	1	1			184	189
APMU 273736 1	APMU 273736 1				0	0	0				187	193
GLDU 045322 4	GLDU 045322 4	GLDU 045322 4	GLDU 045322 4	GLDU 045322 4	1	1	0				189	193
PONU 012736 7	PONU 012736 7	PONU 012736 7	PONU 012736 7	APMU 273736 1	1	1	0				189	194
MAEU 610505 3	MAEU 610505 3	MAEU 610505 3	MAEU 610513 7	MAEU 610505 3	1	0	1				193	198
INKU 222747 1	INKU 222848 1	INKU 222848 1		INKU 222848 1	1	0	1	1			193	198
APMU 270523 5	APMU 270523 5	APMU 270523 5	AIMU 270523 0	APMU 270723 0	1	0	0				196	202
PONU 125411 6	PONU 125411 6	PONU 125411 6	PONU 125411 1	PONU 125411 6	1	0	1				202	206
OCLU 139700 4	OCLU 139700 4	OCLU 139700 4	OCLU 139700 4	OCLU 139700 4	0	0	0			1	206	211
NYKU 656112 1	NYKU 656112 1	NYKU 656112 1	NYKU 656112 1	NYKU 656112 1	1	1	1				210	215
SEAU 785168 6	SEAU 785168 6	SEAU 785168 6	SEAU 785168 8	SEAU 785168 6	1	0	1				214	219
MAEU 576277 3	MAEU 576277 3	MAEU 576277 3	MAEU 576277 3	MAEU 576277 3	1	1	1				219	223
SEAU 826503 6	SEAU 826503 6	SEAU 826503 6	SEAU 826503 6	SEAU 826503 6	1	1	1				223	228

Nb. of containers : 98

Match Code ID	74	Nb. Of Invalid C1	13
Match Code ID C1	41	Nb. Of Invalid C2	10
Match Code ID C2	53	Nb. Of Invalid	5

Perfect match code : 23

	C1	C2	PoM
Accuracy :	48.235%	60.227%	79.570%

DTI

Acceptance Tests Form

MOVE 142

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-23	05 38 42	142	00 05 37	317	314

Visual Inspection C1	Visual Inspection C2	PdM Output	Code ID - C1	Code ID - C2	PdM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid Images C1	C2	Invalid	# Image C1	# Image C2
SCMU 208070 5	SCMU 208070 5	SCMU 208070 5	SCMU 208070 5	SCAU 208070 5	1	1	0				11	12
GESU 216450 1	GESU 216450 1	GESU 216450 1	GESU 216450 1	GESU 216451 1	1	1	0				12	14
TTNU 268925 8		TTNU 264025 8	TTNU 264025 8		0	0	0		1		16	
OCLU 090781 8		OCLU 090781 8	OCLU 090781 8		1	1	0		1		18	
SAMU 271638 1		SAMU 271638 7	SAMU 271638 7		0	0	0		1		22	
ITLU 897507 7					0	0	0		1		24	
PONU 715588 5	PONU 715588 5	PONU 715588 5	PONU 715588 5	PONU 715588 0	1	1	1				26	26
NYKU 231827 6	?YKU 231821 6	NYCU 516321 7	NYCU 516321 7		0	0	0	1	1	1	32	30
CRXU 161143 0	CRXU 161143 0	CRXU 161143 0	CRXU 161143 7	CRXU 161143 0	1	0	1				33	32
TRLU 632756 0	TRLU 632756 0	TRLU 632756 0	TRLU 632756 0	TRLU 632756 0	1	1	1				36	36
TRLU 565028 5	TRLU 565028 5	TRLU 565028 5	TRLU 565028 5	TRLU 565028 5	1	1	1				41	41
OCLU 701361 5	OCLU 701361 5	OCLU 701361 5	OCLU 701361 7	OCLU 701361 0	1	0	1				45	45
PONU 069169 6	PONU 069169 6	PONU 606916 9	PONU 606916 8		0	0	0				49	48
TTNU 233442 7	TTNU 233442 7	TTNU 233442 7	TTNU 233414 2	TTMU 233442 7	1	0	0				51	50
NYKU 602800 4	NYKU 602800 4	TMIU 502800 4	VMIU 502800 4	NYKU 502800 4	0	0	0				55	55
TRIU 499528 7	TRIU 499528 7	TRIU 499527 7	TRIU 499527 7	TRIU 499527 7	0	0	0	1	1	1	59	59
APMU 455562 2	APMU 455562 2				0	0	0				64	65
POCU 420735 9	POCU 420735 9	POCU 420735 9	POCU 420735 9	POCU 420736 9	1	1	1				69	69
PONY 128193 4	PONY 128193 4	PONU 128193 4	PONU 128193 4	PONU 128193 4	0	0	0				74	74
OCLU 143776 6	OCLU 143776 6	OCLU 143776 6	OCLU 143776 6	OCLU 143776 6	1	1	1				80	80
POCU 421415 2	POCU 421415 2	POCU 421415 2	POCU 421415 2	POCU 421416 2	1	1	0				84	84
SEAU 812101 8	SEAU 812101 8	SEAU 812101 8	SEAU 812101 8	SEAU 812101 8	1	1	1				89	89
MAEU 577016 7	MAEU 577016 7	AAEU 577016 7	AAEU 577016 7		0	0	0				94	94
CRLU 912879 7	CRLU 912879 7	CRLU 912879 7	CRLU 912879 7	CRLU 912879 7	1	1	1				98	99
AMPU 454137 8	AMPU 454137 8	AMPU 454137 8		AMPU 454137 8	1	0	1				104	104
SEAU 484868 9	SEAU 484868 7	SEAU 484868 9	SEAU 484868 9	SEAU 484868 9	1	0	0		1		104	104
SEAU 875182 4	SEAU 875182 4	SEAU 875182 8		SEAU 875182 6	0	0	0				110	110
TGHU 725435 0	TGHU 725435 0	TGHU 725435 0		TGHU 725435 0	1	0	1				110	110
PONU 135194 1	PONU 135794 1	PONU 135194 0	PONU 135194 0	PONU 135094 1	0	0	0		1		116	116
TTNU 900817 7	TTNU 900817 7				0	0	0				116	116
CRLU 520652 5	CRLU 520652 5	CRLU 520652 5	CILU 520652 5	CHLU 520652 5	1	0	0				122	122
MWCU 650980 8	MWCU 650980 8	SUCU 650980 8	VUCU 650980 8		0	0	0				132	132
TINU 253401 9	TINU 253401 9	TTNU 253401 9	TTNU 253401 9	TTNU 253401 9	0	0	0				159	158
CLHU 236644 7	CLHU 236644 7	CLHU 236647 7	CLHU 236647 7	CLHU 236647 7	0	0	0	1	1	1	161	159
MAEU 710587 9	MAEU 710581 9	IMEU 710588 7	IMEU 710588 7		0	0	0	1			165	166
NYKU 605867 3	NYKU 605867 3	NTMU 605852 3	NYMU 605852 3	IVMU 505657 1	0	0	0				172	172
GLDU 210209 1	GLDU 210209 1	GLDU 210209 1	GLOU 210209 1	GLOU 210209 1	0	0	0				178	176
MSKU 201181 7	MSKU 201181 7	MSKU 201181 7		MSKU 201181 7	1	0	1				179	178
HLXU 467962 7	HLXU 467962 7	HLXU 467962 7	HLXU 467962 7	HLXU 467962 7	1	1	1				212	212
HLCU 411330 0	HLCU 411330 0	HLCU 416310 0	THIU 413330 5	HLCU 416310 0	0	0	0	1			212	212
HLCU 425899 9	HLCU 425899 9	HLCU 625699 5	HLCU 425899 7	HLCU 695699 5	0	0	0				218	218
HLXU 601869 4	HLXU 601869 4	HLXU 601869 4	HLXU 601869 4	HLXU 601869 4	1	1	0				218	218
HLXU 438280 8	HLXU 438280 8	HLXU 438280 8	ILXU 438280 8	HLXU 438280 8	1	0	1				225	225
HLXU 404626 0	HLXU 404626 0	MLXU 404626 0	MLXU 404626 0	MLXU 404626 0	0	0	0				225	225
HLXU 439760 2	HLXU 439760 2	HLXU 439760 2	HLXU 439760 2	HLXU 439760 2	1	1	1				231	231
HLCU 458757 7	HLCU 458756 7	HLCU 458756 7	HLCU 438756 7	HLCU 458756 7	1	0	1	1			231	231
HLCU 264745 6	HLCU 264745 6	HLCU 264745 6	HLCU 264745 6	HLCU 264745 6	1	1	1				236	235
HLCU 243283 8	HLCU 243283 8	HICU 243283 2	HLCU 243283 9	HITU 243283 7	0	0	0				238	237
HLCU 463181 8	HLCU 463181 8	HLCU 463181 8	HLCU 463181 0	MLCU 463181 8	1	0	0				242	242
HLXU 606748 8	HLXU 606748 8	HLXU 606748 8	HLXU 606748 8	ILXU 606748 7	1	1	0				242	242
HLXU 413209 6	HLXU 413209 6	HLXU 413209 6	HLXU 118209 6	HIXU 413209 6	1	0	0				249	249
HLCU 240051 1	HLCU 240051 1	HLCU 240051 1	HLCU 240061 1	HLCU 240061 1	1	1	1				249	247
HLXU 214659 4	HLXU 214659 4	HLXU 214659 4	HLXU 214659 4	HLXU 214659 4	1	1	1				250	249
TTCU 202262 3	HLCU 202262 2	TTCU 202262 7	TTCU 202262 7		0	0	0	1			254	253
HLXU 229976 2	HLXU 229976 2	MNDU 229976 2		MLCU 229976 2	0	0	0				256	255
HLXU 416827 7	HLXU 416827 1	HLXU 416827 1	HLXU 415827 1	HLXU 416827 1	1	0	1	1			261	261
HLXU 260269 4	HLXU 260269 4	HLXU 260269 4	HLXU 260269 4		1	1	0				261	259
HLXU 261340 4	HLXU 261340 4	HLXU 261340 4	HLXU 261340 4	HLXU 261340 4	1	1	1				262	261
HLXU 260938 5	HLXU 260938 5	HLXU 260938 5	HLXU 260938 5		1	1	0				266	265
HLXU 260675 0	HLXU 260675 0	HLXU 260675 0	HLXU 260675 0	HLXU 260675 0	1	1	1				268	266
HLCU 463365 7	HLCU 463365 7	IICU 463365 7		IICU 463365 7	0	0	0				272	272
HLXU 400019 2	HLXU 400019 2	HLXU 400019 2	HLXU 400019 2	HLXU 400019 2	1	1	1				272	272
HLXU 431585 7	HLXU 431585 7	HLXU 431585 7	HLXU 431585 7	HLXU 431585 7	1	1	1				277	277
HLXU 205379 7	HLXU 205379 0	HLXU 205379 0	HLXU 205379 7	HLXU 205379 6	1	0	0	1			277	276

DTI

Acceptance Tests Form

MOVE 142

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-23	05:38:42	142	00:05:37	317	314

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
HLCU 225249 8	HLCU 225249 8	HLCU 225249 8	HLCU 225249 8	HLCU 225249 8	1	1	1				279	277
HLXU 459275 9	HLXU 459275 9	HLXU 459275 9	MLXU 459275 9	HLXU 459275 9	✗ 1	0	0				283	283
HLCU 417394 7	HLCU 417394 7	HLCU 417394 7	HLCU 417394 7	HLCU 417394 7	1	1	1				283	283

Nb. of containers 67

Match Code ID : 41
Match Code ID C1 : 26
Match Code ID C2 : 26

Nb. Of Invalid C1 9
Nb. Of Invalid C2 9
Nb. Of Invalid 3

Perfect match code 18

	C1	C2	PoM
Accuracy :	44.828%	44.828%	64.063%

DTI

Acceptance Tests Form

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-24	04:23:21	150	00:11:23	308	308

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
INBU 383923 0	INBU 383923 0	INBU 383923 0		INBU 383923 0	1	0	1				11	10
MSKU 231913 7	MSKU 231913 7	MSKU 23???? 7	MSKU 231913 7		0	1	0				13	11
POCU 100401 8	POCU 100401 8	POCU 100401 8	POCU 100401 1	POLU 100401 8	1	0	0				16	14
MSKU 805329 7	MSKU 805329 7	MSKU 805329 7	MSKU 805329 7	MSKU 805329 7	1	1	1				20	17
INKU 287789 7	?NKU 287789 7	INKU 287189 7	INKU 287789 7	ANKU 287789 7	1	1	0		1		23	21
MSKU 235334 2	MSKU 235334 2			MSKU 235334 2	0	0	1				25	24
MAEU 672922 9	MAEU 672922 9	IAEU 672922 9	IAEU 672922 9		0	0	0	1			26	25
MWCU 609904 6	MWCU 609904 6				0	0	0				30	28
MWCU 654770 5	MWCU 654770 5				0	0	0				30	28
MWCU 611382 2	MWCU 611382 2	MWCU 611382 2	MWCU 611382 2	MWCU 611382 2	1	1	1				34	32
MWCU 612145 3	MWCU 612145 3	MWCU 612145 3	MWCU 612145 3	MWCU 612145 3	1	1	1				34	32
MWCU 606573 0	MWCU 606573 0	MWCU 606573 0	MWCU 606573 0	MWCU 606573 0	1	1	1				39	36
MAEU 538847 3	MAEU 538847 3	MAEU 538847 3	MAEU 538847 3	MAEU 538847 3	1	1	1				39	36
???? ?????? ?	CNRU 000884				0	0	0	1			44	41
???? ?????? ?	PONU 124285 3	PONU 124285 3	PONU 174285 1	PONU 124285 3	1	0	1	1			44	41
MAEU 570370 2	MAEU 570370 2	MAEU 570370 2	MAEU 570370 2	IAEU 570370 2	1	1	0				47	45
APMU 552664 0	APMU 552664 0	APMU 552664 0	APMU 552664 0	APMU 552664 0	1	1	1				47	45
MWCU 608074 0	MWCU 608074 0	MWCU 608074 0	MWCU 608074 0	MWCU 608074 0	1	1	1				52	50
TTNU 917650 6	TTNU 917650 6	WINU 917650 8	WINU 917[illegible]06 [illegible]	WINU 917650 8	0	0	0				52	50
MAEU 538429 3	MAEU 538429 3	MAEU 538429 3	MAEU 538429 3	MAFU 538429 1	1	1	0				56	54
OCLU 131943 9	OCLU 131943 9	OCLU 131943 9		OLLU 131943 9	1	0	0				56	54
SEAU 215441 5	SEAU 215441 5	SEAU 215441 5		SEAU 215441 5	1	0	1				59	58
MSKU 221292 0	MSKU 221292 0	MSKU 221292 0	MSKU 221292 0		1	1	0				60	59
PONU 142052 8	PONU 142052 8	PONU 142052 8	PONU 142052 8	PONU 142052 8	1	1	1				60	58
HLXU 607328 5	HLXU 607328 5	HLXU 607328 5	HLXU 607328 5	HLXU 607328 5	1	1	1				64	62
HLXU 408352 0	HLXU 408352 0	HLXU 408352 0	HLXU 408352 0	HLXU 408352 0	1	1	1				64	62
HLXU 229903 7	HLXU 229903 7	HLXU 229903 7		HLXU 229903 7	1	0	1				67	66
HLCU 209533 6	HLCU 209533 6	HLCU 872095 3	HLCU 872095 3		0	0	0				68	67
HLXU 617084 0	HLXU 617084 0	HLXU 617084 0	HLXU 617084 0	HLXU 617084 0	1	1	1				68	66
HLXU 465472 1	HLXU 465472 1	HLXU 4654?? 7		HLXU 4654[illegible] [illegible]	0	0	0				72	70
HLXU 445096 5	HLXU 345096 5	HLXU 445096 5	HLXU 345096 5	HLXU 445096 5	1	0	1				72	70
TGHU 201297 8	TGHU 201291 8	TGHU 201291 8		TGPU 201291 8	0	0	0	1			75	74
MSKU 214674 6	MSKU 214674 6	MSKU 214674 6	MSKU 214674 6		1	1	0				76	75
PONU 741930 8	PONU 741930 8	PONU 741930 8	PONU 741930 8	PONU 741910 8	1	1	1				76	74
TRLU 230833 0	TRLU 230833 0	TRLU 230833 0		TRLU 230833 0	1	0	1				79	78
MSKU 210042 6	MSKU 210042 6	MSKU ?????? 6	MSKU 210042 6		0	1	0				80	79
PONU 725489 3	PONU 725489 3	PONU 725489 3	PONU 725489 3	PONU 725489 3	1	1	1				80	78
MSKU 205108 6	MSKU 205108 6			MSKU 205158 6	0	0	1				83	82
MSKU 228452 9	MSKU 228452 9	MSKU 228452 9	MSKU 228452 9		1	1	0				84	83
IEAU 431517 0	IEAU 431517 0	IEAU 431517 0	IFAU 431517 0	IFAU 431517 0	1	0	0				84	82
MSKU 233893 9	MSKU 233893 9	MSKU 233893 9	MSKU 233893 9	MSKU 233893 9	1	1	1				87	86
GATU 103880 1	GATU 103880 1	GATU 103880 1	GATU 103880 1		1	1	0				88	87
MAEU 455616 6	MAEU 455616 6	MAEU 455616 6	MAEU 455616 6	MAEU 455616 6	1	1	1				88	86
MAEU 684199 0	MAEU 684199 0	MAEU 684199 0		MAEU 684199 0	1	0	1				91	90
GLDU 017403 0	GLDU 017403 0	GLDU 017403 0	GLDU 017403 0		1	1	0				93	92
MSKU 820634 9	MSKU 820634 9	MSKU 820634 9	MSKU 820634 9	MSKU 820631 9	1	1	0				93	90
GLDU 200084 4	GLDU 200084 4	GLDU 200084 4	GLDU 200084 4		1	1	0				95	94
PONU 094185 6	PONU 094185 6				0	0	0				97	97
GATU 104162 0	GATU 104162 0				0	0	0				99	98
MSKU 204238 2	MSKU 204238 2	MSKU ?????? ?		MSKU 204238 2	0	0	1				101	100
POCU 063038 3	POCU 063038 3		POCU 063038 3		0	1	0				102	102
CRXU 160837 7	CRXU 160837 7	CRXU 16083? ?		CRXU 16083[illegible] [illegible]	0	0	0	1	1	1	105	104
MSKU 218612 1	MSKU 218612 1		MSKU 218612 1		0	1	0				107	105
MAEU 633446 6	MAEU 633446 6	MAEU 633476 7	MAEU 634456 [illegible]	MAEU 633416 6	0	0	0				107	104
POCU 064251 1	POCU 064251 1	POCU 064251 1		POCU 064251 1	1	0	1				110	109
PONU 077027 0	PONU 077027 0	PONU 077027 0	PONU 077027 0		1	1	0				111	110
POCU 105336 8	POCU 105336 8	POCU 105336 8	POCU 105336 8	POCU 105338 8	1	1	0				111	109
GATU 093617 8	GATU 093617 8	GATU 093617 ?		GATU 093617 [illegible]	0	0	0				114	113
MAEU 685326 6	MAEU 685326 6	MAEU 685326 6	MAEU 685326 6		1	1	0				115	114
PONU 748530 0	PONU 748530 0	PONU 748530 0	PONU 748530 0	PONU 748530 0	1	1	1				120	118
PONU 150848 1	PONU 150848 1	PONU 150848 1	PONU 150848 1	PONU 150848 1	1	1	1				120	118
SEAU 811510 2	SEAU 811510 2	SEAU 811510 2	SEAU 811510 2	SEAU 811510 2	1	1	1				124	121
MAEU 816472 8	MAEU 816472 8	MAEU 816478 7	MAEU 816478 [illegible]	MAEU 816418 [illegible]	0	0	0	1			124	121
SEAU 811776 4	SEAU 811776 4	SEAU 811776 4	SEAU 811776 6	SEAU 811776 4	1	0	1				128	125

DTI Acceptance Tests Form

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-24	04:23:21	150	00:11:23	308	308

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
PONU 714705 1	PONU 714705 1	PONU 714705 1	PONU 714705 1	PONU 714705 1	1	1	1				128	125
MAEU 817029 1	MAEU 817029 1	MAEU 817029 3	MAEU 817029 1	MAEU 817029 1	1	1	1				138	136
PONU 722114 1	PONU 722114 1	PONU 722114 1	POGU 722114 1	PONU 722114 1	1	1	1				138	136
GATU 075079 2	GATU 075079 2	GATU 575079 2		GATU 095078 2	1	0	0				141	139
POCU 005210 9	POCU 005210 9	POCU 005210 9	POFU 005210 9		1	0	0				142	141
POCU 121415 9	POCU 121415 9			POCU 121415 9	0	0	1				142	139
GATU 035602 7	GATU 035602 7	GATU 535602 7		GATU 535602 7	1	0	1				145	144
KNLU 322827 4	KNLU 322827 4	KNLU 322827 4	KNLU 322827 4		1	1	0				146	145
MAEU 808432 4	MAEU 808432 4	MAEU 808432 4	MAPU 408432 4	MALU 818402 4	1	0	0				146	144
SCMU 201088 4	SCMU 201088 4	SCMU 201088 4		SCMU 201088 4	0	0	1				149	148
POCU 043659 4	POCU 043659 4	POCU 043659 4	POCU 043659 4		1	1	0				150	149
CAXU 492595 4	CAXU 492595 4	CAXU 492595 4	CAXU 492555 4	CAXU 492595 4	1	0	1				150	148
SEAU 217644 1	SEAU 217646 1	SEAU 217646 1		SEAU 217646 1	1	0	1				153	152
POCU 018995 4	POCU 018995 4	POCU 018995 4	POCU 018895 4		1	1	0				154	153
PONU 715503 6	PONU 715503 6	PONU 715503 6	PONU 715503 6	PONU 715503 6	1	1	1				154	152
HLXU 234088 7	HLXU 234088 7	HLXU 2????? 7		HLXU 234088 7	0	0	1				157	156
HLXU 213495 2	HLXU 213495 2		HLXU 213495 2		0	1	0				159	157
HLCU 240429 2	HLCU 240429 2	HLCU 240429 2		HLCU 240429 2	1	0	1				161	160
HLCU 209377 6	HLCU 209377 6	HLCU 209377 6	HLCU 209377 6		0	0	0				162	161
HLXU 425720 0	HLXU 425720 0	HLXU 425720 0	HLXU 425725 0	HLXU 425720 0	1	1	1				165	163
POCU 620177 9	POCU 620177 9	POCU 620177 9	POCU 620177 9	POCU 620177 9	1	1	1				181	179
PONU 731558 2	PONU 731558 2	PONU 731558 2		PONU 731558 2	1	0	1				188	186
PONU 713821 4	PONU 713821 4	PONU 713821 4	PONU 713821 4	PONU 713873 4	1	1	0				193	191
NDLU 401175 4	NDLU 401175 4	TIPU 400175 4		TIPU 400175 4	0	0	0				201	198
MSKU 819414 5	MSKU 819414 5	MSKU 819414 5	MSKU 819414 5	MSKU 819414 5	1	1	1				204	202
TRLU 524047 0	TRLU 524047 0	TRLU 524047 0	TRLU 5240** *	TRLU 524047 0	1	0	1				211	209
KNLU 512181 1	KNLU 512181 1	KNLU 512181 1	KNLU 512181 1	KNLU 512181 1	1	1	1				214	212
SEAU 859569 7	SEAU 859569 7	SEAU 859569 7	SEAU 859563 0	SEAU 859569 7	1	0	1				222	220
POCU 012586 1	POCU 012586 1	POCU 012586 1		POCU 012586 1	1	0	1				225	224
OCLU 904780 7	OCLU 904780 7	OCLU 904780 2	OCLU 904780 0		0	0	0				226	225
???? 624777 7	INBU 624778 0	TGHU 255477 7	WDHU 2554** *		0	0	0	1			229	227
NDLU 400365 6	NDLU 400365 6	NDLU 400365 6	NDLU 400365 6	NDLU 400555 1	0	0	1			1	229	227
TGHU 734139 1	TGHU 734139 1	TGHU 734139 1	TATU 733139 3	TGHU 734139 1	1	0	1				233	231
ITLU 519702 1	ITLU 519702 1	ITLU 819702 1	ITLU 994471 0	ITLU 819702 1	0	0	0				233	231
HLXU 421907 9	HLXU 421907 9	HLXU 421907 9	HLXU 421907 9	HLXU 421907 9	1	1	1				237	235
HLXU 610355 9	HLXU 610355 9	HLXU 610355 9	HLXU 610355 9	HLXU 610355 9	1	1	1				241	239
HLXU 455422 2	HLXU 455422 2	HLXU 455422 2	HLXU 455422 2	HLXU 455422 2	1	1	1				241	239
GATU 437815 0	GATU 437815 0	GATU 437805 0	GATU 437815 0	GATU 437805 0	0	1	0				244	242
HLCU 401289 3	HLCU 401289 3	???? ?????? ?	*RPU 440128 9	HLCU 401288 6	0	0	0		1		244	242
HLXU 434760 1	HLXU 434760 1	HLXU 434760 1	HLXU 434760 1	HLXU 434760 1	1	1	1				248	245
HLXU 616908 9	HLXU 616908 9	HLXU 616908 9	HLXU 616908 9	HLXU 616908 9	1	1	1				248	245
HLCU 454238 8	HLCU 454238 8	HLCU 454238 8	HLCU 454238 8	HLCU 954238 8	1	1	1				251	249
HLXU 608876 8	HLXU 608876 8	HLXU 608876 8	HLXU 608876 8	HLXU 608876 8	1	1	1				251	249
AJIU 880145 5	AJIU 880145 5	AJIU 801457 7		AJIU 801457 5	0	0	0	1			254	253
CLHU 232789 0	CLHU 232789 0	CLHU 232789 0	CLHU 232789 0		1	1	0				255	254
TRLU 498410 1	TRLU 498410 1	TRLU 498410 1	TRLU 498410 1	TRLU 498410 1	1	1	1				255	253
CAXU 955040 2	CAXU 955040 2	CAXU 955040 2	CAXU 955040 2		1	1	0				259	257
SEAU 811191 4	SEAU 811191 4	SEAU 811191 4		SEAU 811191 4	1	0	1				259	257
SEAU 221625 5	SEAU 221625 5	SEAU ?????? ?	SEAU ****** *	SEAU 221625 5	0	0	1				261	260
TTNU 352259 7	TTNU 352259 7	TTNU 352259 7	TTNU 352259 *		0	0	0	1	1	1	262	261
MAEU 619543 6	MAEU 619543 6	MAEU 619543 6	MAEU 619543 6	MAEU 619518 0	1	1	0				262	260
CRLU 516172 9	CRLU 516172 9	CRLU 516172 9	CRLU 516172 9	CRLU 516172 9	1	1	1				266	264
TRIU 956012 2	TRIU 956012 2	TRIU 956012 2	TRIU 956012 2	TRIU 656015 5	1	0	0				266	264
MAEU 408888 4	MAEU 408888 4	MAEU 408881 4		MAEU 408881 4	0	0	0				269	267
TRLU 537822 0	TRLU 537822 0	TRLU 537822 0	TRLU 537822 0	TRLU 537822 0	0	0	1				274	271
POCU 702477 1	POCU 702477 1	POCU 702477 1	POCU 702477 1	POCU 702477 1	1	1	1				274	271
CLHU 803660 0	CLHU 803660 0	CLHU 803660 0	CLIU 803660 0	CLPU 803660 0	1	0	0				277	275
NYKU 699619 8	NYKU 699619 8	NYKU 699619 8	NYKU 699629 8	NYKU 699619 8	1	0	0				277	275
GLDU 205355 4	GLDU 205355 4	GLDU 205355 4		GLDU 205355 4	1	0	0				279	278
POCU 060003 1	POCU 060003 1	POCU 060003 1	POCU 060003 3		1	1	0				281	280
NYKU 243729 9	NYKU 243729 9	NYKU 243729 9		NYKU 243729 9	1	0	1				283	282
MSKU 202198 6	MSKU 202198 6	MSKU 202198 6	MSKU 202198 6		1	1	0				284	283
GSTU 978157 4	GSTU 978157 4	GSTU 978157 4	GSTU 978157 4	GSTU 978157 4	1	1	1				287	285
KN?? 729672 2	KNLU 512969 2	???? 512969 ?	GSIU 512962 2	KNLU 512969 ?	0	0	0	1			292	289
NYKU 672377 3	NYKU 672377 3	NYKU 672377 3	NYKU 672377 3	NYKU 672377 3	1	1	1				295	293

DTI **Acceptance Tests Form**

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-24	04:23:21	150	00:11:23	308	308

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
TTNU 957464 6	TTNU 957464 6	TTNU 957464 6	TTNU 957464 6	TTNU 957464 6	1	1	1				299	297
PONU 727747 7	PONU 727747 7	PONU 727747 7	PONU 727747 7	PONU 727747 7	1	1	1				302	300
KNLU 342361 9	KNLU 342361 9				0	0	0				305	304

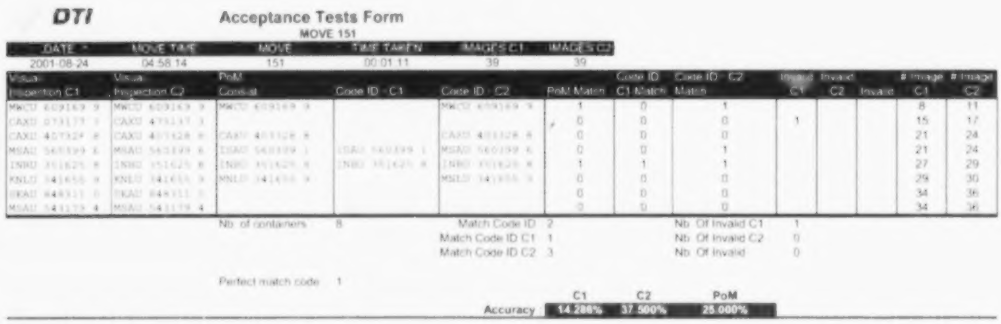
Nb. of containers 132

Match Code ID : 92
Match Code ID C1 : 68
Match Code ID C2 : 69

Nb. Of Invalid C1 : 10
Nb. Of Invaliv C2 : 4
Nb. Of Invalid : 3

Perfect match code 40

	C1	C2	PoM
Accuracy :	55.738%	53.906%	71.318%



DTI

Acceptance Tests Form

MOVE 151

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-24	04:58:14	151	00:01:11	39	39

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
MWCU 609169 9	MWCU 609169 9	MWCU 609169 9		MWCU 609169 9	1	0	1				8	11
CAXU 073177 3	CAXU 475137 3				0	0	0	1			15	17
CAXU 407324 8	CAXU 407328 8	CAXU 403128 8		CAXU 403128 8	0	0	0				21	24
MSAU 565399 6	MSAU 563399 6	ISAU 560399 1	ISAU 560399 1	MSAU 560399 6	0	0	1				21	24
INBU 351625 8	INBU 351625 8	INBU 351625 8	INBU 351625 8	INBU 351620 8	1	1	1				27	29
KNLU 341656 9	KNLU 341655 9	MNLU 341456 9		MSLU 341656 9	0	0	0				29	30
SKAU 848311 0	SKAU 848311 0				0	0	0				34	36
MSAU 543179 4	MSAU 543179 4				0	0	0				34	36

Nb. of containers	8	Match Code ID	2	Nb. Of Invalid C1	1
		Match Code ID C1	1	Nb. Of Invalid C2	0
		Match Code ID C2	3	Nb. Of Invalid	0

Perfect match code 1

	C1	C2	PoM
Accuracy	14.286%	37.500%	25.000%

DTI

Acceptance Tests Form

MOVE 159

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-25	03:21:21	159	00:04:42	350	328

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
HLCU 201475 6	HLCU 201475 6	HLCU 201475 6	HLCU 201475 6		1	1	0				12	14
???? 022487 3	???? 022487 3	LGIU 465137 ?		LGIU 465137 7	0	0	0	1	1	1	17	18
HLXU 271227 5	HLXU 211227 5	HLXU 211227 5	HLXU 291226 5	HLXU 211227 5	1	0	1	1			19	20
HLXU 440780 3	HLXU 440780 3	HLXU 440780 3	HLXU 440780 3	HLXU 440780 3	1	1	1				22	25
HLCU 462979 7	HLCU 462979 7	HLCU 462979 7	HLCU 462979 7		0	0	0	1	1	1	27	30
HLXU 407318 3	HLXU 407318 3	HLXU 407318 3	MLXU 407318 3	HLXU 407318 3	1	0	1				27	30
HLXU 461072 3	HLXU 461072 3	HLXU 461072 3	HLXU 461072 3	HLXU 461072 3	1	0	1				31	35
HLXU 424490 1	HLXU 424490 1	HLXU 424490 1	HLXU 424490 1	HLKU 424490 1	1	1	0				36	39
HLXU 606603 3	HLXU 606603 3	HLXU 606603 3	HLXU 606603 3		1	1	0				42	45
HLXU 438351 1	HLXU 438351 1	HLXU 438351 1	HLXU 438351 1		1	1	0				42	45
HLCU 410882 8	HLCU 410882 8	HLCU 410882 8	HLCU 462459 7	HLCU 410882 8	1	0	1				47	50
HLXU 402528 8	HLXU 407528 7			HLXU 402528 6	0	0	1		1		47	50
HLCU 463305 7	HLCU 463305 7	HLCU 463307 7	HLCU 463307 7		0	0	0	1	1	1	51	55
HLCU 423778 5	HLCU 423778 5	HLCU 423778 5	MLCU 423778 5	HLCU 423768 5	0	0	0				51	55
HLCU 462459 7	HLCU 462459 7		HLCU 462459 7		0	0	0	1	1	1	56	
HLXU 416546 4	HLXU 416546 4	HLXU 416546 4	HLXU 416546 4	HLXU 402528 6	1	1	0				56	
HLXU 435078 1	HLXU 435078 1	MLXU 435078 1	MLXU 435078 1		0	0	0				61	
HLXU 404526 3	HLXU 404526 3	HLXU 404526 3	MLXU 404526 3	HLXU 404526 3	1	0	1				66	61
HLXU 437861 8	HLXU 437861 8	HLXU 437861 8	HLXU 437861 4	HLXU 437861 8	1	0	1				71	65
HLCU 412864 9	HLCU 412864 0	HLCU 412864 0	HLCU 341286 4	HLLU 412864 0	0	0	0			1	76	69
HLCU 428064 7	HLCU 428064 7	HLCU 428064 7	HLCU 428064 7	HLCU 428064 7	1	1	1				80	74
HLXU 456742 1	HLXU 456742 1	MLXU 459742 1	MLXU 458742 0	MLXU 456742 1	0	0	0				80	74
HLXU 438489 0	HLXU 438489 0	HLXU 438489 0	HLXU 438489 0	HLKU 438489 0	1	1	0				85	78
HLXU 405050 5	HLXU 405050 5	HLXU 405050 5	HLXU 405050 5	HLXU 405050 5	0	0	1			1	85	78
HLXU 605363 2	HLXU 605363 2	HLXU 605363 2	HLXU 605363 9	HLXU 605363 2	1	0	1				91	84
OOLU 510382 1	OOLU 510382 1	OOLU 510382 1	OOLU 510382 1	OOLU 510302 1	1	1	0				91	84
OOLU 802113 6	OOLU 802113 6	OOLU 802113 6	OOLU 802113 6	OOLU 802113 6	1	1	1				96	90
HLXU 456499 4	HLXU 456499 4	MLXU 456499 0	MLXU 456499 4	MLXU 456499 4	0	0	0			1	96	90
HLXU 453681 6	HLXU 453681 6	HLXU 453681 6	HLXU 753681 6	HLXU 453681 6	1	0	1				102	96
HLCU 422371 3	HLCU 422371 3	HLCU 422371 3	HLCU 422371 3	HLCU 422371 3	1	1	1				102	96
OOLU 516043 6	OOLU 516043 6	OOLU 516043 6	OOLU 516043 8	OOLU 516043 6	1	0	1				108	102
OOLU 800121 1	OOLU 800121 1	OOLU 800121 1	OOLU 800121 1	OOLU 800121 1	1	1	1				113	106
HLCU 454415 9	HLCU 454415 9	HLCU 454415 9	HLCU 454415 9	HLCU 454415 9	1	1	1				117	111
HLXU 607479 0	HLXU 607479 0	HLXU 607479 0	HLXU 607479 0	HLXU 607479 0	1	1	1				122	116
OOLU 800146 4	OOLU 800146 4	OOLU 800146 4	OOLU 800146 4	OOLU 800146 4	1	1	1				127	120
HLXU 221187 4	HLX7 221187 4	HLX7 221187 4	HLX7 221187 4		0	0	0		1		133	125
SCZU 874860 2	SCZU 874860 2	SCZU 874860 2	SCZU 874860 2	SCZU 874860 2	1	1	1				134	126
SCZU 874883 4	SCZU 874883 4	SCZU 874883 4	SCZU 874883 4	SCZU 874883 4	1	1	1				139	131
HLXU 217506 2	HLXU 217506 2	HLXU 217506 2	HLXU 217506 2	HLXU 217506 2	1	1	1				140	132
SCZU 874886 0	SCZU 874886 0	SCZU 874886 0	SCZU 871886 0	SCZU 874886 0	1	0	1				145	137
HLCU 221687 0	HLCU 221687 0	HLCU 221687 0	HLCU 221687 0	HLCU 221687 0	1	1	1				146	139
MAKU 836399 3	MAKU 836399 3	MAKU 836399 3	MAKU 836399 3		1	1	0				151	145
INKU 230688 2	INKU 230688 2			INKU 230688 8	0	0	0				151	145
TRIU 918743 0	TRIU 918743 0	TRIU 918743 0	TRIU 918743 7	TRIU 918743 0	1	0	1				156	150
INKU 230730 1	INKU 230730 1	INKU 230730 1	INKU 230730 1	INKU 230688 8	1	1	0				156	150
TTNU 925549 0	TTNU 925549 0	CTMU 925549 0	IIWU 925549 0	?TMU 925549 0	0	0	0				162	156
SKAU 860651 2	SKAU 860651 2	SKAU 860651 2	SKAU 960657 ?	SKAU 860651 2	1	0	1				162	156
PONU 711999 6	PONU 711999 6	PONU 711999 6	PONU 711999 6	#DNU 711+99 %	1	1	0				168	162
MSKU 818109 2	MSKU 818109 2	MSKU 818109 2	MSKU 818109 2	MSKU 818109 2	1	1	1				168	162
MSKU 800167 3	MSKU 800167 3	MSKU 800167 3	MSKU 800167 3		1	1	0				174	168
TTNU 955908 7	TTNU 955908 7	TTNU 955908 7	TTNU 955908 7	TTNU 955908 7	1	1	1				174	168
PONU 718601 6	PONU 718601 6	PONU 718601 6	PONU 718601 6	PONU 718601 6	1	1	1				181	175
CAXU 491272 5	CAXU 491272 ?	CAXU 491272 ?	CAXU 491272 %		0	0	0		1		181	175
SKAU 836143 0	SKAU 836143 0				0	0	0				186	180
CRXU 931097 8	?RXU 731097 8	CRXU 931097 8	CRXU 931097 8	#RXU 931097 1	1	1	0		1		186	180
SKAU 838523 7	SKAU 838523 7				0	0	0				192	186
MAKU 821167 5	?AKU 721164 5				0	0	0	1	1	1	192	186
PONU 748357 0	PONU 748357 0	PONU 748357 0	PONU 748357 0		1	1	0				198	
APMU 801290 0	APMU 801290 0	APMU 801200 0	APMU 801200 0		0	0	0				198	
KNLU 507699 3	KNLU 507699 3	KNLU 507699 3	KNLU 507699 3		1	1	0				203	
SKAU 838228 5	SKAU 838228 5				0	0	0				203	
GLDU 057711 7	GLDU 057711 7	GLDU 057711 7	GLDU 057711 7		1	1	0				208	
MAKU 453168 2	MAEU 453168 2	MALU 453168 2	MALU 453168 2		0	0	0				208	
TTNU 956922 8	TTNU 956922 8	??NU 956922 8	##NU 956922 8		0	0	0				213	

DTI

Acceptance Tests Form

MOVE 159

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-25	03:21:21	159	00:04:42	350	328

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
INBU 489300 3	INBU 489300 3	INBU 489300 3	INBU 489300 3		1	1	0				213	
TEXU 545753 4	TEXU 545753 4	TEXU 545753 4	TEXU 545753 4		1	1	0				218	
PONU 738489 7	PONU 738489 7	PONU 718419 0	PONU 738489 7	PONU 718119 0	0	1	0				218	
OCLU 701724 6	OCLU 701724 6	OCLU 771724 6	OCLU 701724 6	OCLU 7•1724 6	0	1	0				224	195
OCLU 137603 8	OCLU 137603 8	OCLU 137603 8	OCLU 137603 8	OCLU 137603 8	1	1	1				224	195
TTNU 982392 3	TTNU 982392 3				0	0	0				229	200
TTNU 916013 7	TTNU 916013 7	TTNU 916013 7		TTNU 916513 7	1	0	1				229	200
INKU 229256 2	INKU 229256 2	INKU 229256 2	INKU 229256 2	INKU 229256 2	1	1	1				233	205
MSKU 808882 1	MSKU 808882 1	MSKU 808882 1	MSKU 808882 1	MSKU 808882 1	1	1	1				233	205
MAKU 801025 5	MAKU 801025 5	MAKU 801025 5	AAKU 801025 5	MAKU 801025 5	1	0	1				238	209
PONU 718119 0	PONU 718119 0	PONU 718119 0	PONU 718119 0		1	1	0				238	209
TRIU 935442 0	TRIU 935442 0	TRIU 935442 0	TRIU 93544$ $	TRIU 935442 0	1	0	1				243	214
FRLU 961233 5	FRLU 961233 5	FRLU 961233 5		FRLU 961233 5	1	0	1				243	214
MSKU 817853 0	MSKU 817853 0	MSKU 817753 0	MSKU 817851 0	MSKU 817•53 0	0	1	0				249	221
SCMU 431016 0	SCMU 431016 0	SCMU 431016 0	SCMU 431016 0		1	1	0				249	221
MSKU 807139 3	MSKU 807139 3	MSKU 807139 3	MSKU 807139 3		1	1	0				254	225
MAKU 815496 7	MAKU 815496 7	UAKU 815496 7	MAKU 815406 7	UAKU 815496 7	0	0	0				254	225
TGHU 702091 6	TGHU 702091 6	TGHU 702117 [illegible]	TGHU 72209• 6	TGHU 70211$ $	0	0	0				259	230
PONU 718273 0	PONU 718273 0	PONU 718273 0	PONU 718273 0	PONU 718273 0	1	1	0				259	230
APMU 800950 6	APMU 800950 6	APMU 800960 6	APMU 800960 6		1	1	0				264	235
PONU 736387 3	PONU 736387 3	PONU 736387 7	PONU 73638$ $	PONU 736367 $	0	0	0	1			264	235
	INKU 727578 1				0	0	0	1	1	1		240
	KNLU 512111 4	KNLU 512111 4		KNLU 512111 4	1	0	1	1				240
	CATU 809345 7	CATU 809345 7		$ATU 809345 7	0	0	0	1				246
	MAKU 725282 4	MAKU 725406 7	MAKU 815406 7	MAKU 72528$ $	0	0	0	1				246
TRLU 553387 0	TRLU 553387 0	TRLU 553387 0	TRLU 553387 0	TRLU 553387 0	1	1	1				270	251
TTNU 935857 0	TTNU 935857 0	TTNU 935857 0	TTNU 935857 $	TTNU 935857 0	1	0	1				270	251
INKU 230199 9	INKU 230199 9	?NKU 301999 7	$$KU 301999 $	$NKU 301999 $	0	0	0				275	256
TRIU 901479 6	TRIU 901479 6	TRIU 901479 6	TRIU 901479 6	TRIU 901479 6	1	1	1				275	256
MAKU 823429 7	MAKU 823429 7	MAKU 823429 7	MAKU 223420 7	MAKU 823429 7	1	0	1				280	262
TRIU 986290 3	TRIU 986290 3	TRIU 986277 7	TRIU 98628$ $		0	0	0				291	272
OCLU 121666 2	OCLU 121666 2	OCLU 421666 2		OCLU 421666 2	0	0	0				296	277
CAXU 499422 0	CAXU 499422 0	CAXU 499422 0	CAXU 499422 0		1	1	0				305	287
PONU 717949 1	PONU 717949 1	PONU 717949 1	PONU 717949 1	PONU 717949 1	1	1	1				311	293
SEAU 847711 7	SEAU 847711 7	SEAU 847717 7	SEAU 84776$ $	SEAU 84771$ $	0	0	0				321	302
TTNU 916537 6	TTNU 916537 6	TTNU 916537 8	TTNU 91653? $	TTNU 916537 8	0	0	0				327	309
MSKU 818918 0	MSKU 818918 0	MSKU 818918 0	MSKU 818918 0		1	1	0				337	319

Nb. of containers : 101

Match Code ID : 64
Match Code ID C1 : 48
Match Code ID C2 : 42

Nb. Of Invalid C1 : 11
Nb. Of Invalid C2 : 10
Nb. Of Invalid : 9

Perfect match code : 21

	C1	C2	PoM
Accuracy :	53.333%	46.154%	69.565%

OTI

Acceptance Tests Form

MOVE 160

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-25	05:51:58	160	00:12:48	336	335

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
GATU 406935 0	GATU 406935 0	GATU 406935 0	GATU 406935 0	GATU 406935 0	1	1	1				13	10
GATU 407070 4	GATU 407070 4	GATU 407070 4	GATU 407070 4	GATU 407070 4	1	1	1				17	14
SKAU 221429 0	SKAU 221429 0	SKAU 021429 0		SKAU 021429 0	0	0	0				21	18
TRLU 303776 2	TRLU 303776 2	TRLU 303776 2	TRLU 303776 2		1	1	0				22	19
HLCU 456143 3	HLCU 456143 3	HLCU 456143 3	HLCU 456143 3	HLCU 456141 8	1	1	0				26	23
HLXU 434287 3	HLXU 434287 3	HLXU 434287 3	HLXU 434287 3	HLXU 434287 3	1	1	1				26	23
HLXU 445171 9	HLXU 445171 9				0	0	0				31	27
HPCU 400200 4	HLCU 400707 7				0	0	0	1	1	1	31	27
HLXU 403427 4	HLXU 403427 4	HLXU 403427 4	HLXU 403427 4	HLXU 340342 7	1	1	0				35	32
HLXU 409611 0	HLXU 409611 0	HLXU 409611 0	HLXU 409611 0	HLXU 409611 0	1	1	1				35	32
HLCU 457993 6	HLCU 457997 6	HLCU 457993 6	HLCU 457993 6	HLCU 450996 8	1	1	0		1		40	36
HLXU 410345 7	HLXU 410345 7	HLXU 410345 7	HLXU 410345 7	HLXU 410345 7	1	1	1				49	45
HLXU 437417 1	HLXU 437417 1	HLXU 437417 1	HLXU 437417 1	HLXU 437417 1	1	1	1				56	53
KNLU 472221 3	KNLU 472221 3	KNLU 472221 3	KNLU 472221 3	KNLU 472221 3	1	1	1				71	67
MWCU 660342 9	MWCU 660342 9	MWCU 660342 9	MWCU 660342 9	NWCU 660342 9	1	1	0				71	67
APMU 552833 9	APMU 552833 9	APMU 552833 9	APMU 552833 9	APMU 552833 9	1	1	1				75	71
MWCU 614066 4	MWCU 614066 4	MWCU 614066 4	VVCU 614066 4	MWCU 614066 4	1	0	1				75	71
POCU 105318 3	POCU 105318 3	POCU 105318 3	POCU 68x431 0	POCU 105318 3	1	0	1				80	76
HLXU 227855 9	HLXU 227855 9				0	0	0				82	80
HLCU 260671 3	HLCU 260671 3	HICU 260671 3	HICU 260671 3		0	0	0				84	81
HLXU 233563 0	HLXU 233563 0	HLXU 232563 0		HLXU 232563 0	0	0	0				87	84
HLXU 210721 6	HLXU 210721 6				0	0	0				88	85
HLXU 609639 9	HLXU 609619 9	HLXU 609639 9		HLXU 609639 9	1	0	1				88	84
HLXU 213416 6	HLXU 213416 6	HLXU 213416 6		HLXU 213416 6	1	0	1				92	89
UTTU 241151 7	UTTU 241151 7				0	0	0				92	90
HLXU 453297 6	HLXU 453297 6	HLXU 453297 6	HLXU 450297 6	HLXU 453297 6	1	0	1				92	89
TTNU 475252 9	TTNU 475252 9	TTNU 475252 9	TTNU 475288 5	TINU 475252 9	1	0	1	1			97	93
UXXU 452109 4	UXXU 452109 4	UXXU 452109 4	UXXU 452109 4	UXXU 452109 4	1	1	1				101	97
TRIU 948788 6	TRIU 748788 6	TRIU 948788 6	TRIU 948788 6	TRIU 948788 6	1	1	0		1		105	101
SCZU 737638 9	SCZU 737638 9	SCZU 737638 9	SCZU 737638 9	SCZU 737638 9	1	1	0				107	104
CRXU 248169 1	CRXU 248169 1	CRXU 248169 1	CRXU 248169 1		1	1	0				108	105
KNLU 501050 2	KNLU 501050 2	KNLU 503050 2	KNLU 501050 2	KNLU 500050 2	1	1	0				111	108
MAEU 705190 1	MAEU 705190 1	MAEU 705190 1	MAEU 705190 1	MAEU 705188 8	1	1	0				114	111
OCLU 146127 4	OCLU 146127 4	OCCU 186127 4		OC-U 186127 4	0	0	0		1		117	114
MAEU 675264 0	MAEU 675264 0				0	0	0				120	117
CAXU 601113 5	CAXU 601113 5				0	0	0				121	118
GATU 818215 3	GATU 818215 3	GATU 818210 3	GATU 818219 3	GATU 818215 3	1	1	1				124	121
HLXU 451489 0	HLXU 451489 0	HLXU 451489 0	HLXU 451489 0	HLXU 451489 0	1	1	1				124	121
HLXU 223251 0	HLXU 223251 0	HLXU 223251 0	HLXU 223251 0	HLXU 223251 0	1	1	1				127	124
HLXU 261130 9	HLXU 261130 9	HLXU 261110 9	HLXU 261110 4		0	0	0				128	125
HLXU 612366 3	HLXU 612366 3	HLXU 612366 3	HLXU 612366 3	HLXU 611366 3	1	1	1				128	124
HLXU 200407 5	HLXU 200407 5	HLXU 200407 5	HLXU 200407 6	HLXU 200407 5	1	0	1				130	128
HLXU 234712 5	HLXU 234712 5	HLXU 234712 5	HLXU 234712 5		1	1	0				132	129
HLXU 432801 0	HLXU 432801 0	HLXU 432801 0	HLXU 432801 0	HLXU 432801 0	1	1	1				132	128
HLXU 417247 9	HLXU 417247 9	HLXU 417247 9	HLXU 417247 3	HLXU 417247 9	1	1	1				135	132
HLCU 457957 7	HLCU 457957 7	HLCU 457957 7	HLCU 457958 7	HLCU 457957 7	1	0	1				135	132
HLXU 414379 0	HLXU 414379 0	HLXU 414379 0	HLXU 414379 0	HLXU 414378 1	1	1	0				139	135
HLXU 452128 8	HLXU 452128 8	HLXU 452128 8	HLXU 452128 8	HLXU 452128 8	1	1	0				139	135
TTNU 325714 0	TTNU 325714 0	TTNU 325714 0		TTNU 325714 0	1	0	1				142	139
MAEU 791792 7	MAEU 791892 6	MAEU 791892 6	MAEU 791892 6		1	0	0	1			143	140
MLCU 474444 7	MLCU 474444 7	MLCU 474444 7	MLCU 474444 7	MLCU 474444 7	1	1	1				143	139
CLHU 407927 9	CLHU 407927 9	CLHU 407927 9	CLHU 407927 9	CLHU 407927 9	1	1	1				147	144
INBU 481567 5	INBU 481567 5	INBU 481567 5	INBU 481567 6	INBU 481567 6	1	0	0				147	144
POCU 110253 9	POCU 110253 9	POCU 177777 9	POCU 102531 4	POCU 110253 9	0	0	1				151	148
OCLU 137684 8	OCLU 137684 8	OCLU 137684 8	OCLU 137684 8	OCLU 137684 8	1	1	1				151	148
PONU 072214 3	PONU 072214 3	PONU 077714 3		PONU 077714 3	0	0	0				154	152
GLDU 539031 6	GLDU 539031 6	GLDU 539031 6	GLDU 539031 6		1	0	0				155	153
TTNU 466678 1	TTNU 466678 1	TITU 466678 1	*ITU 466678 1	AIPU 886678 1	0	0	0				155	152
SKAU 217269 8	SKAU 217269 8				0	0	0				158	156
GESU 211867 7	GESU 211867 7				0	0	0				159	157
CLHU 556488 7	CLHU 556488 7	CLOU 556488 7	ALOU 556488 7	OLOU 556488 7	0	0	0	1			163	159
MAEU 733365 4	MAEU 733365 4	MAEU 733365 4	MAEU 733365 4	MAEU 733365 4	1	0	1				163	159
APMU 600938 4	JPMU 600938 4	JPMU 600938 4	APMU 600938 4	APMU 600938 4	0	0	0		1		166	163
APMU 452017 0	APMU 452017 0	APMU 452017 0	APMU 452017 0	APMU 452017 0	1	0	1				166	163

OTI

Acceptance Tests Form

MOVE 160

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-25	05:51:58	160	00:12:48	336	335

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
TRLU 414567 6	TRLU 414560 6	TRLU 414567 6	TRLU 414560 0	TRLU 414566 0	0	0	0				170	166
PONU 719175 4	PONU 719175 4	PONU 719175 4	PONU 719175 4	PONU 119115 4	1	1	0				170	166
ICSU 494974 4	ICSU 494974 4	ICSU 494974 4		ICSU 494974 4	1	0	1				172	170
CAXU 250834 7	CAXU 250834 0	CAXU 250834 0	CAXU 250834 0		1	0	0	1			173	171
GATU 102674 0	GATU 102674 0	GATU 102674 0	GATU 102815 0	GATU 102674 0	1	0	1				176	174
TOPU 311035 7	TOPU 311035 7	TOPU 311035 3	IOPU 311035 3		0	0	0	1	1	1	177	175
GSTU 737795 9	GSTU 737795 9	GSTU 737795 9	GSTU 737795 9	GSTU 737795 9	1	1	1				177	174
GATU 105238 0	GATU 105238 0			GATU 105238 0	0	0	1				180	178
GATU 102915 1	GATU 102915 1				0	0	0				181	179
POCU 111171 5	POCU 111171 5	POCU 111171 5	POCU 11711 5	POCU 111171 5	1	0	1				181	178
GSTU 286088 2	GSTU 286088 2	GSTU 286088 2		GSTU 286088 2	1	0	1				185	183
GATU 082751 2	GATU 082751 2	GATU 082751 2	GATU 082751 2	GATU 105238 0	1	1	0				186	184
PONU 136568 9	PONU 136568 9	PONU 136568 9	PONU 136568 9	PONU 136568 9	1	1	1				186	183
SAMU 220100 0	SAMU 220100 0	SAMU 220100 0		SAMU 220100 0	0	0	0				189	187
APMU 276349 0	APMU 276349 0	APMU 276349 0	APMU 276349 0		1	1	0				190	188
MAKU 603533 6	MAKU 603533 6	MAKU 603533 6	MAKU 603533 6	MAKU 603533 6	1	1	1				195	191
KNLU 510254 1	KNLU 510254 1	KNLU 510254 1	KNLU 510254 1	KNLU 510254 1	1	1	1				195	191
MLCU 431730 0	MLCU 431730 0	MLCU 431732 0	MLCU 431735 0	MLCU 431710 0	1	1	1				199	196
GLDU 057942 3	GLDU 057942 3	GLDU 057942 1	GLDU 057942 3	OOLU 667942 9	1	0	0				202	199
SKAU 847474 0	SKAU 847474 0	SKAU 847474 0	SKAU 147474 0	SKAU 84-474 0	1	0	0				206	203
TOPU 311008 1	TOPU 311008 1	TOPU 311008 1		TOPU 311008 1	1	0	1				209	207
GATU 076643 0	GATU 076643 0	GATU 076643 0	GATU 076643 0		1	1	0				210	208
MAKU 577481 4	MAKU 577481 4	MAKU 577481 4	MAKU 577481 4	MAKU 511411 4	1	1	0				216	213
APMU 804586 4	APMU 804586 4	APMU 804586 4	APMU 804586 4	APMU 804586 4	1	1	1				219	216
GLDU 058870 2	GLDU 058870 2	GLDU 058870 2	GLDU 058870 2		1	1	0				222	219
CAXU 291710 0	CAXU 291710 0				0	0	0				286	284
SCMU 401029 2	SCMU 401029 2	SCMU 401029 2	SCVU 401029 2	SCMU 401073 2	1	0	0				289	286
POCU 113128 6	POCU 113128 6	POCU 113128 6	POCU 113112 8	POCU 113128 6	1	0	1				292	289
NYKU 608894 0	NYKU 608894 0	NYKU 608894 0	NYKU 608894 0	NYKU 608894 0	1	1	1				295	292
GLDU 096300 1	GLDU 096300 1	GLDU 096300 1	GLDU 096300 1	GLDU 096300 1	1	0	0				298	295
OCLU 131316 9	OCLU 131316 9	OCLU 131316 9	OCLU 131316 9	OCLU 131316 9	1	1	1				302	299
HLXU 446734 0	HLXU 446734 0	HLXU 446734 0	HLXU 446734 0	HLXU 446734 0	1	1	1				306	303
OOLU 675789 0	OOLU 675789 0	OOLU 675789 0	OOLU 675789 0	OOLU 675789 0	1	1	1				309	306
HLXU 445981 3	HLXU 445981 3	HLXU 445981 3	HLXU 445981 3	HLXU 445981 3	1	1	1				312	309
HLXU 610309 7	HLXU 610309 7	HLXU 610309 7	HLXU 610309 7	HLXU 610309 7	1	1	1				315	312
HLCU 456810 2	HLCU 456810 2				0	0	0				319	315
HLXU 608690 8	HLXU 608690 8	HLXU 608690 8	HLXU 608690 8	HLXU 608690 8	1	1	1				323	319
HLCU 215587 8	HLCU 215587 8				0	0	0				326	323
HLXU 202816 9	HLXU 202816 9	HLXU 202816 9	HLXU 202816 9		1	1	0				327	325
OOLU 351011 3	OOLU 351011 3				0	0	0				330	326
HLCU 213831 2	HLCU 213831 2				0	0	0				335	330

Nb. of containers 105

Match Code ID 76
Match Code ID C1 51
Match Code ID C2 50

Nb. Of Invalid C1 6
Nb. Of Invalid C2 6
Nb. Of Invalid 2

Perfect match code 31

	C1	C2	PoM
Accuracy	51.515%	50.505%	73.786%

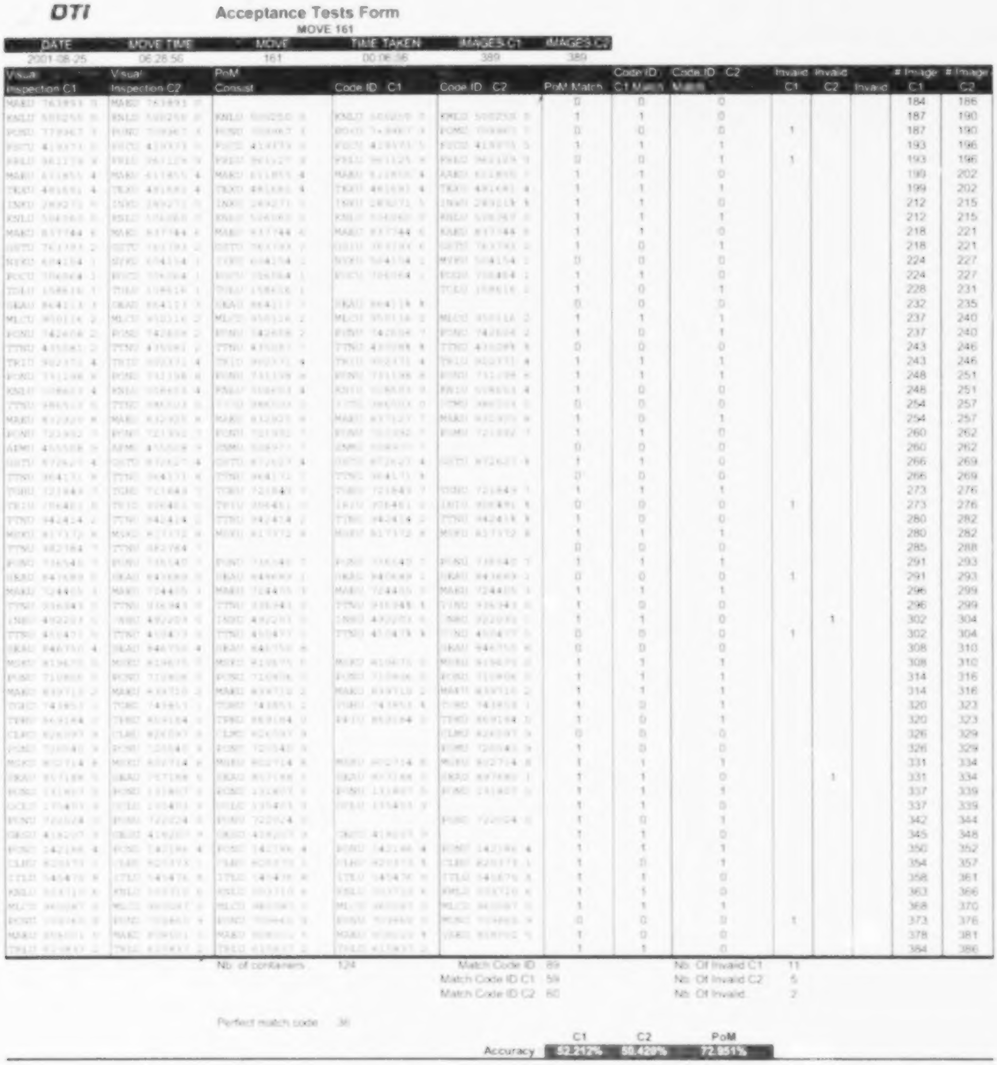
DTI

Acceptance Tests Form

MOVE 161

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-25	06 28 56	161	00 06 56	389	389

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code-ID C1 Match	Code-ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
TTNU 211508 0	TTNU 211508 0	TTNU 211508 0	TTNU 211208 0	TTNU 211508 0	1	1	0				10	12
MAKU 787814 0	MAKU 787814 0	MAKU 787814 0	MAKU 787814 0	MAKU 787814 1	1	1	0				12	13
OKNU 204825 0	OKNU 204825 0	OKNU 204825 0	OKNU 204825 0	OKNU 204825 0	1	1	1				16	18
SCMU 202345 4	SCMU 202345 4	SCMU 202345 4	STPU 202345 4	SCMU 202345 4	1	0	1				18	19
APMU 272345 4	APMU 272345 4	APMU 272345 0	APMU 272345 0	APMU 272341 0	0	0	0				23	24
TTNU 295841 7	TTNU 295841 7	TTNU 295471 0	TTNU 291688 8		0	0	0	1	1	1	24	26
PONU 718289 4	PONU 718283 4	PONU 718289 4	PONU 718289 4	PONU 718289 4	1	1	1				29	32
PONU 741233 0	PONU 741233 0	PONU 741233 0	PONU 741233 0	PONU 741233 0	0	0	0				29	32
PONU 739040 0	PONU 739040 0	PONU 739040 0	PONU 739040 0		1	1	0				34	37
KNLU 512398 7	KNLU 512398 7	KNLU 512398 7	KNLU 512398 7		1	1	0				34	37
MAKU 452096 5	MAKU 452096 5	MAKU 452096 5	MAKU 452096 5	IAKU 452096 5	1	1	0				40	43
PONU 743618 3	PONU 743618 4	PONU 743618 7	PONU 743618 7	PONU 743618 3	0	0	0				40	43
CLHU 822297 8	CLHU 822297 8	CLHU 822297 8	CLHU 822297 8	CLHU 822297 8	1	1	1				46	49
MAKU 450657 1	MAKU 450657 1	MAKU 450657 1	MAIU 450657 1	MAKU 450657 1	1	0	1				46	49
INBU 511710 7	INBU 511710 7	INBU 511710 7	INBU 511710 8	INBU 511710 7	1	0	1	1			52	55
KNLU 425851 9	KNLU 425851 9	KNLU 425851 9	BNLU 425851 9	KNLU 425851 9	1	0	1				52	55
POCU 113400 6	POCU 113400 6	POCU 113400 6	POCU 113400 6	POCU 113400 6	1	1	1				57	60
MAKU 701277 8	MAKU 701277 8	KAKU 701277 8	KAKU 701277 8		0	0	0		1		63	66
APMU 804612 0	APMU 804612 0	APMU 804612 0	APMU 804612 0	APMU 804612 0	1	1	1				68	71
GATU 875240 8	GATU 875240 8				0	0	0				73	74
FRSU 228184 2	FRSU 228184 2				0	0	0				74	76
TRIU 846549 3	TRIU 846549 3				0	0	0				76	79
TEXU 418644 1	TEXU 418644 1	TEXU 418644 1	TEXU 418644 1	TTXU 718644 1	1	1	0				81	84
FRLU 861588 0	FRLU 861588 0	FRLU 861588 0	FRLU 861588 0	FRLU 861588 0	1	1	1				81	84
NYKU 603348 5	NYKU 603348 5	7YMU 707487 7	NYMU 603348 5	MYMU 555548 1	0	0	0				87	90
INBU 468614 0	INBU 468614 0				0	0	0				87	90
KNLU 467840 6	KNLU 467840 6	KNLU 467840 6	KNLU 467840 6	KNLU 467840 6	1	0	1	1			93	96
KNLU 412422 5	KNLU 412422 5	KNLU 412472 5	KNLU 412222 5	KNLU 412472 5	1	0	0				93	96
SEAU 428145 0	SEAU 428145 0	SEAU 428145 0	SEAU 428145 0	SEAU 428145 0	1	1	1				98	101
PONU 129360 8	PONU 129360 8	PONU 129360 8	PONU 129360 9	PONU 129360 8	1	0	1				98	101
GATU 433854 6	GATU 433854 6	GATU 433854 6	GATU 433814 6	GATU 433854 6	1	1	1				104	107
CMBU 408969 9	CMBU 408969 9	7TTU 407967 7	CAHU 402969 9	SEKU 40896R 9	0	0	0				104	107
SEAU 428231 2	SEAU 428231 2	SEAU 428231 2	SEAU 428211 2	SEAU 428231 2	1	1	1				110	113
POCU 420613 6	POCU 420613 6	POCU 420613 6	POMU 420613 6	POCU 420613 6	1	0	1				110	113
MAKU 253818 4	MAKU 253818 4	MAKU 253818 4	MAKU 253818 4	MAKU 253818 4	1	1	1				115	118
MA?? 700721 7	MAKU 705121 7				0	0	0	1	1	1	115	118
TGHU 417296 2	TGHU 417296 2	TGHU 417706 7	TGHU 417706 8		0	0	0				121	124
MAKU 620613 3	MAKU 620613 0	MAKU 620613 0	MAKU 620613 5	MAKU 620613 0	1	0	1	1			121	124
ITLU 518622 0	ITLU 518622 0	ITLU 518622 0	ITLU 518622 0	ITLU 518622 0	1	1	0				127	130
PONU 133027 6	PONU 133027 6	PONU 133027 6	PONU 111027 6	PONU 133027 6	1	0	1				127	130
TRIU 540363 4	TRIU 540363 4	TRIU 540363 1	TRIU 540363 8		0	0	0				132	135
NDLU 481591 3	NDLU 481591 3	NDLU 481591 3	NDLU 481591 3		0	0	0				132	135
POCU 421034 7	POCU 421034 7	POCU 421034 7	POCU 421101 4	POCU 421034 7	1	0	1				138	141
TTNU 524253 5	TTNU 524253 5	TTNU 524253 5		TTNU 524253 5	1	0	1				138	141
PONU 712443 6	PONU 712443 6	PONU 712443 6	PONU 712443 6	PONU 712443 6	1	1	1				144	147
OKBU 410381 0	OKBU 410381 0	OKBU 410381 0	OKGU 410381 0	OKBU 410381 0	0	0	1				144	147
PONU 714818 7	PONU 714818 7	PONU 714818 7	PONU 714818 7	PONU 714818 7	1	0	0				149	152
POCU 101315 4	POCU 101315 4	POCU 101315 4	POCU 101315 1	POCU 101315 4	1	0	1				149	152
KNLU 508382 1	KNLU 508382 1	KNLU 508382 1	KNLU 508382 1	KNLU 508382 1	1	1	1				155	158
SEAU 781220 5	SEAU 781220 5	SEAU 781220 5	SEAU 781220 5	SEAU 781220 5	1	1	1				155	158
INBU 314251 7	INBU 314251 7	INBU 314251 7	INBU 314251 7	INBU 314251 7	1	1	1				159	160
OCLU 139677 6	OCLU 139677 6	OCLU 139677 6	OCLU 139677 6	OCLU 139677 6	1	1	1				159	162
GLDU 212885 6	GLDU 212885 6	GLDU 212885 6	GLDU 212885 6	GLDU 212885 6	1	1	1				160	162
MSKU 211362 6	MSKU 211362 6	MSKU 211362 6	MSKU 211362 6	MSKU 211362 6	1	1	1				163	164
TTNU 450074 3	TTNU 450074 3	TTNU 450074 3	TTNU 450074 3	TINU 450074 3	1	1	0				163	166
MAKU 681767 2	MAKU 681767 2	MAKU 681767 2	MAKU 681767 2	MAKU 681767 2	1	1	1				164	166
TEXU 449515 0	TEXU 449515 0	TEXU 449515 0	TEXU 446516 5	TEXU 449515 0	1	0	1				167	170
KNLU 428667 6	KNLU 428667 6	KNLU 428667 6	KNIU 428667 6	KNLU 428667 6	1	0	1				167	170
OCLU 122570 4	OCLU 122570 4	OCLU 122570 4	OCLU 122570 4	OCLU 122570 1	1	1	0				171	174
NYKU 606652 8	NYKU 606652 8	NYKU 606652 8	NYCU 606652 9	NYMU 606152 8	1	0	0				171	174
PONU 711956 8	PONU 711956 8	PONU 711956 8	PONU 711956 8	PONU 711956 8	1	1	1				176	180
NYKU 650423 0	NYKU 650423 0	7YYU 555427 0	NYMU 650421 0	MYKU 650425 0	0	0	0				176	180
MAKU 774820 9	MAKU 774820 9				0	0	0				181	183
SAMU 218844 7	SAMU 218844 7	SAMU 218844 7	SAMU 218844 7		1	1	0				183	184
MAKU 761893 5	MAKU 761893 5				0	0	0				184	186



OTI

Acceptance Tests Form

MOVE 161

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-25	06:28:56	161	00:06:36	389	389

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]				0	0	0				184	186
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				187	190
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			187	190
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				193	196
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	1	1			193	196
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				199	202
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				199	202
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				212	215
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				212	215
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				218	221
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				218	221
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				224	227
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				224	227
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				228	231
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				232	235
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				237	240
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				237	240
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				243	246
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				243	246
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				248	251
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				248	251
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				254	257
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				254	257
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				260	262
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				260	262
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				266	269
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				266	269
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				273	276
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			273	276
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				280	282
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				280	282
[illegible]	[illegible]				0	0	0				285	288
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				291	293
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			291	293
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				296	299
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				296	299
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0		1		302	304
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			302	304
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0				308	310
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				308	310
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				314	316
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				314	316
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				320	323
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				320	323
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0				326	329
[illegible]	[illegible]	[illegible]		[illegible]	1	0	0				326	329
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				331	334
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0		1		331	334
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				337	339
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				337	339
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				342	344
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				345	348
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				350	352
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				354	357
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				358	361
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				363	366
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				368	370
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			373	376
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				378	381
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				384	386

Nb. of containers : 124

Match Code ID 89

Match Code ID C1 59

Match Code ID C2 60

Nb. Of Invalid C1 11

Nb. Of Invalid C2 5

Nb. Of Invalid 2

Perfect match code 36

	C1	C2	PoM
Accuracy	52.212%	50.420%	72.951%

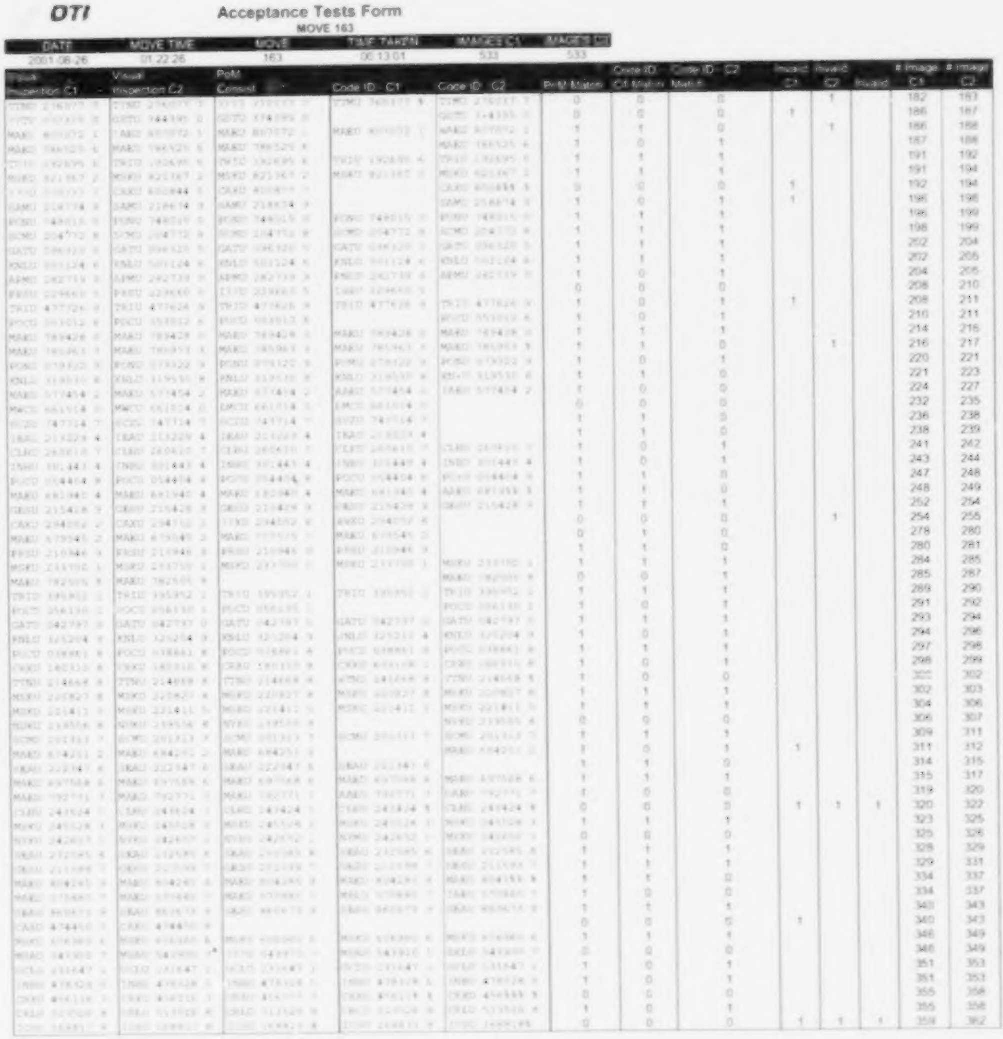
DTI

Acceptance Tests Form

MOVE 163

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-26	01:22:26	163	00:13:01	533	533

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
PONU 128770 8	PONU 128770 8				0	0	0				10	12
MSKU 858266 7	MSKU 858066 7				0	0	0				14	17
INKU 230681 4	INKU 730671 4				0	0	0		1		18	21
INBU 468571 4	INBU 468571 4				0	0	0				22	25
PONU 387528 7	PONU 587528 7				0	0	0				27	28
POCU 040135 0	POCU 040135 0	TICU 040135 0		AICU 040139 0	0	0	0				32	33
TRIU 342622 4	TRIU 342622 4	TTIU 426224 1		WWIU 426224 1	0	0	0				33	34
CMBU 230746 7	CMBU 230746 7	CMBU 230746 7		CMBU 230746 7	1	0	1				36	38
TPXU 705793 0	TPXU 705793 0	TPXU 705793 0		TPXU 705793 0	1	0	1				38	39
CTXU 303933 2	CTXU 303933 2	CTXU 303933 2		CTXU 303933 2	1	0	1				41	43
NYKU 291348 2	NYKU 291148 2	NYMU 291384 2		NYMU 291384 2	0	0	0				43	44
TPHU 691132 5	TPHU 691132 5	TPHU 691132 5	TPHU 691132 5		1	1	0				47	48
TRIU 363612 8	TRIU 363612 8	TRIU 363612 8	TRIU 363612 8		1	1	0				48	50
TRLU 297866 6	TRLU 297866 6	TRLU 297866 6	TRLU 297866 6		1	1	0				51	53
POCU 058864 2	POCU 058864 2	POCU 058864 2	POCU 058864 2	POCU 058864 2	1	1	1				53	54
MLCU 276746 7	MLCU 276746 8				0	0	0	1			56	57
PONU 079254 2	PONU 079256 2	PONU 079256 2	PONU 079256 2	PONU 079256 2	1	0	1				57	58
MAKU 771095 3	MAKU 771095 3				0	0	0				60	61
CAXU 240312 2	CAXU 240312 2	CAXU 240312 3		CAXU 240312 8	0	0	0	1			62	63
PONU 075778 3	PONU 075778 3	PONU 075779 1	MONU 075779 3	PONU 075779 3	1	0	1				65	66
TKXU 220335 1	TKXU 220335 1	TKXU 220335 1		TKXU 220335 1	1	0	1				66	67
PONU 068980 5	PONU 068980 5	PONU 068980 1	PONU 068980 5	PONU 068980 5	1	1	1				70	71
[illegible]	GSTU 860143 7	GSTU 060147 3		GSTU 860148 8	0	0	0	1			71	72
GATU 870448 3	GATU 870448 3	CATU 870448 3	CATU 870448 3		0	0	0				74	75
MSKU 225490 4	MSKU 225490 4	MSKU 225490 4	MSKU 225490 4	MSKU 225490 4	1	1	1				75	77
TTNU 247007 7	TTNU 247007 7	TTNU 247007 7	TTNU 247008 4		0	0	0	1	1	1	78	79
SKAU 211066 5	SKAU 211066 5	SKAU 211086 8	SFAU 211086 8		1	0	0				79	80
SKAU 225853 3	SKAU 225853 3	SKAU 225853 3	SKAU 225853 3	SKAU 225853 9	1	1	0				82	83
GATU 045882 0	GATU 045882 0	GATU 045882 0	GATU 045882 0	GATU 045882 0	1	1	1				83	84
SAMU 251037 7	SAMU 251037 7			SAMU 251038 1	0	0	0	1	1	1	85	87
GSTU 260051 9	GSTU 260051 9	GSTU 260059 3		GSTU 260059 8	0	0	0				87	88
NUKU 655824 1	NUKU 655824 1	NUKU 655824 1	NUKU 655824 1	NUKU 555824 1	1	1	0				90	92
TTNU 461407 3	TTNU 461407 3	TTNU 461407 3		TTNU 461407 3	1	0	1				93	96
POCU 122056 8	POCU 122056 8	POCU 122056 8	POCU 122056 8	POCU 122056 8	1	1	1				97	100
INBU 469381 2	INBU 469381 2	INBU 469381 2	IMBU 469381 7	INBU 469381 2	1	0	1				101	104
INBU 484716 7	INBU 484716 7	INBU 484777 7		INBU 484788 8	0	0	0	1	1	1	105	108
CAXU 258782 1	CAXU 258782 1	CAXU 258782 1	CAXU 258782 1		1	1	0				110	111
RSLY 103606 9	RSLY 103606 9	MGAU 103606 9		MGAU 103606 9	0	0	0				111	113
POCU 009563 0	POCU 009563 0	POCU 009563 0	POCU 009563 0		1	1	0				115	116
KNLU 341016 5	KNLU 341016 5	INLU 341016 5		INLU 341016 5	0	0	0				116	117
KNLU 312726 3	KNLU 312726 3	KNLU 312726 1	KNLU 312726 1	KNLU 312726 1	1	1	1				119	120
GLDU 215470 5	TLDU 215470 5	CLDU 215470 5	CLDU 215470 5	WLDU 215470 5	0	1	0		1		120	121
POCU 006354 6	POCU 006354 6	POCU 006354 6	POCU 006354 6	POCU 006354 6	1	1	1				123	125
TKXU 247742 9	TKXU 247742 9	TKXU 247742 9	TKXU 247742 9	TKXU 247742 9	1	1	1				125	126
PONU 087173 8	PONU 087173 8	PONU 087173 8	PONU 087173 8		1	1	0				128	129
CLMU 206476 8	CLMU 706476 8				0	0	0		1		129	130
MAKU 740817 8	MAKU 740817 8	MAKU 740817 8	MAKU 740817 8	IATU 740817 8	1	1	0				133	136
PONU 712651 0	PONU 712651 0	PONU 712651 0	PONU 712651 0	PONU 712651 0	1	0	1				133	136
MSKU 605141 7	MSKU 605141 7	MSKU 605141 7	MSKU 605141 7	MSKU 605141 7	1	1	1				138	141
PONU 736215 7	PONU 736215 7	PONU 736215 7	PONU 736215 7	PONU 136215 7	1	1	0				138	141
GSTU 773112 7	GSTU 893112 8	GSTU 893112 8		GSTU 893112 8	1	0	1	1			144	146
KNLU 501552 9	KNLU 501552 9	KNLU 501552 9	KNLU 501552 9	KNLU 501552 9	1	1	0				144	146
PONU 132090 9	PONU 132090 9	PONU 132090 9	PONU 132090 9	PONU 132090 9	1	1	1				149	151
SKAU 861765 1	SKAU 861765 1	SKAU 861765 1	SKAU 861765 1	SKAU 861765 1	1	1	1				149	151
TRIU 468204 6	TRIU 468204 6	TRIU 468204 6	TRIU 468204 6	TRIU 468204 6	1	1	1				154	157
ITLU 546486 9	ITLU 546486 9	ITLU 546486 9	ITLU 546486 9	ITLU 546486 9	1	1	1				154	157
PONU 142978 3	PONU 142978 3	PONU 142978 3	PONU 142978 3	PONU 142978 3	1	1	1				159	162
GCLU 135893 9	GCLU 135893 9	GCLU 135893 9	GCLU 135893 9	GCLU 135893 9	1	1	1				159	162
GLDU 063987 8	GLDU 063987 8	GLDU 063987 8	GLDU 063987 8	GLDU 063987 8	1	1	1				164	167
TOLU 154776 0	TOLU 154776 0	ITLU 154777 7	ITLU 154770 8	TOLU 154776 8	0	0	0	1	1	1	164	167
KNLU 501993 0	KNLU 501993 0	KNLU 501993 0	KNTU 501993 0	KNLU 501993 0	1	0	1				170	172
POCU 100734 1	POCU 100734 1	PRLU 007141 1	PCIU 007141 1	POCU 100734 1	0	0	0				175	178
POCU 004664 1	POCU 004664 1	POCU 004664 1	POCU 004664 1	POCU 004664 1	1	1	1				180	182
TRLU 533408 1	TRLU 533408 1	TRLU 533408 1	TRLU 533408 1	TRLU 533408 1	1	1	1				180	183



OTI

Acceptance Tests Form

MOVE 163

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-26	01:22:26	163	00:13:01	533	533

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2

DTI

Acceptance Tests Form

MOVE 163

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-26	01:22:26	163	00:13:01	533	533

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
KNLU 428617 2	KNLU 428617 2	KNLU 428617 2	KNLU 428617 2	KNLU 428617 2	1	1	1				359	362
MAKU 627706 8	MAKU 627706 8	MAKU 627706 8	MAKU 627706 8	MAKU 627768 8	1	1	0				364	366
NDLU 401982 1	NILU 401982 1	NDLU 401982 1	NILU 401982 1	NDLU 401982 1	1	1	1				364	366
MAKU 606952 6	MAKU 606952 6	MAKU 606952 6	MAKU 606952 6	MAKU 606952 6	1	1	1				368	370
KNLU 428952 5	KNLU 428952 5	KNLU 428952 5	KNLU 428952 5	KNLU 428952 6	1	0	0				368	370
CAXU 474139 2	CAXU 474139 2	CAXU 474139 2		CAXU 474138 2	1	0	1				373	375
SEAU 857595 7	SEAU 857595 7	SEAU 857595 7	SEAU 857595 7	SEAU 857595 7	1	1	1				373	375
MAKU 635136 0	MAKU 635136 0	AAKU 635136 0	AAKU 635136 0		0	0	0				377	379
MAKU 700225 5	MAKU 700225 5	MAKU 707717 7	MAKU 700555 5	MAKU 705555 5	0	0	0				377	379
MAKU 772667 9	MAKU 702667 9	MAKU 702677 7	MAKU 702667 9	MAKU 702279 9	0	0	0	1			382	384
MAKU 819969 5	MAKU 819969 5	MAKU 819969 5	MAKU 819940 0	JAIU 819981 5	1	0	0				382	384
SEAU 785741 0	SEAU 785741 0	SEAU 785741 0	SEAU 785741 0	SEAU 785741 0	1	1	1				386	388
SEAU 785880 2	SEAU 785880 2	SEAU 785880 2	SEAU 785880 2	SEAU 785880 2	1	1	1				386	388
KACU 912397 0	KACU 912397 0	KACU 912397 0	KACU 912397 0	KACU 912487 0	1	1	1				391	393
SEAU 851854 0	SEAU 851854 0	SEAU 851854 0	SEAU 851854 0	SEAU 851854 4	1	1	0				391	393
MAKU 659901 2	MAKU 659901 2	MAKU 659901 2	MAKU 659908 2	AAKU 659904 2	1	0	0				410	412
SEAU 851170 2	SEAU 851170 2	SEAU 851370 2	SEAU 651370 1	SEAU 853772 2	1	0	0				410	412
PONU 153637 5	PONU 153637 5	PONU 153637 5	PONU 153637 5	PONU 153637 6	1	1	1				416	418
GSTU 946190 3	GSTU 746170 3	GSTU 946190 3	GSTU 946190 4		1	1	0		1		416	418
PONU 151192 6	PONU 151192 6	PONU 151192 6	PONU 151192 6	PONU 151192 6	1	1	1				421	423
INKU 230710 6	INKU 230710 6	INKU 230710 6	INKU 230710 6	INKU 230710 6	1	1	1				421	423
MAKU 813641 2	MAKU 813641 2	MAKU 813641 2	MAKU 813641 2	IAKU 813040 2	1	1	0				427	429
KNLU 427103 8	KNLU 427103 8	KNLU 427103 8		KNLU 427103 8	1	0	1				427	429
PONU 149091 0	PONU 149091 0	PONU 149091 0	PONU 149091 0	PONU 149091 0	1	1	1				432	434
PONU 127722 7	PONU 127722 7	PONU 127722 7	PONU 127722 7	PONU 127722 7	1	1	1				432	434
MAKU 611217 6	MAKU 611217 6	7770 611206 7	AAKU 611206 5	AIJU 611206 5	0	0	0				436	438
SCZU 466028 3	SCZU 466028 3	SCZU 466028 3	SCZU 466028 7	SCZU 466028 3	1	0	1				436	438
MAKU 702624 1	MAKU 702624 1	MAKU 702624 1	MAKU 702624 1	AAKU 702624 1	1	1	0				441	443
SAMU 401787 7	SAMU 401787 7	SAMU 401787 7	SAMU 401787 7	SAMU 401787 7	1	1	1				441	443
MAKU 613453 4	MAKU 613453 4	MAKU 613453 4	MAKU 613453 4	MAKU 613453 4	1	1	1				445	447
PONU 125426 3	PONU 125426 3	PONU 125426 3	PONU 125426 1	PONU 125426 3	1	0	1				445	447
POCU 112676 2	POCU 112676 2	POCU 112676 2		POCU 112676 2	1	0	1				451	453
INKU 284650 9	INKU 284650 9	INCU 284650 9		INCU 284650 9	0	0	0				451	453
MAKU 606794 5	MAKU 606794 5	MAKU 606794 5	EABU 406794 5	AAKU 606794 5	1	0	0				457	459
SEAU 812892 2	SEAU 812892 2	SEAU 812892 2	SEAU 812832 2	SEAU 812892 2	1	1	1				457	459
MAKU 603902 8	MAKU 603902 8	MAKU 603902 8	CAKU 603902 8	MAKU 603802 8	1	0	1				463	465
SEAU 805859 5	SEAU 805859 5	SEAU 805859 5	SEAU 805859 5	SEAU 805859 5	1	1	1				463	465
CLHU 425787 7	CLHU 425787 7	CLHU 425777 7	CLHU 425745 5	CLHU 425785 5	0	0	0	1	1	1	469	471
GSTU 986621 8	GSTU 786671 8	GSTU 986621 8	GSTU 786821 8	GSTU 886655 5	1	1	0		1		469	471
SEAU 806475 1	SEAU 806475 1	SEAU 806475 1	SFAU 806476 1	SEAU 806475 1	1	0	1				475	477
TPHU 517654 9	TPHU 517654 9	TPHU 517654 9	TIMU 517654 9	TPHU 517654 9	1	1	1				475	477
TRLU 617683 8	TRLU 617683 8	TRLU 617683 8	TRLU 617683 8	TRLU 617683 8	1	1	1				481	483
GLDU 404732 6	GLDU 404732 6	GLDU 404732 6	GLDU 404732 6	GLDU 404732 6	1	0	0				481	483
UXXU 430170 7	UXXU 430160 7	UXXU 301607 7		UXXU 301607 5	0	0	0	1			488	490
PONU 718019 0	PONU 718019 0	PONU 718059 0	PONU 718019 0	PONU 718019 0	1	1	1				488	490
MSKU 612491 4	MSKU 612491 4	MSKU 612491 4	MSKU 612491 4		1	1	0				493	495
MAKU 632166 4	MAKU 672166 4	MAKU 612166 4	MAKU 612166 4		0	0	0				493	495
MAKU 604117 5	MAKU 604117 5	MAKU 604117 5	IAKU 604117 5	MAKU 604117 5	1	0	1				499	501
GLDU 401086 2	GLDU 401086 2	GLDU 401086 2	GLDU 401086 2	GLDU 401086 2	1	1	1				499	501
IKAU 420785 4	IKAU 420785 4	IKAU 420785 4	IKAU 420765 4	IEAU 420781 4	1	1	1				505	507
TRIU 449637 6	TRIU 449637 6	TRIU 449637 6	***U 449637 6	TRIU 449637 8	1	0	1	1			505	507
KNLU 324885 6	KNLU 324885 6	KNLU 324885 6	KNLU 324885 6	KNLU 324885 C	1	1	1				512	512
MAKU 656395 5	MAKU 606395 5	AJIU 656395 5	AJIU 656395 5		0	0	0				514	516
BENU 480635 7	BENU 480635 7	BENU 480635 7	BENU 480163 5	BENU 480635 7	1	0	1				519	521
MAKU 620781 5	MAKU 620781 5	MAKU 620781 5	MAKU 620781 5	MAKU 620781 5	1	1	1				523	525
MAKU 627604 3	MAKU 627604 3	MAKU 627604 3	AAKU 627674 3	MAKU 627604 3	1	0	1				528	530

Nb. of containers : 195

Match Code ID : 138
Match Code ID C1 : 92
Match Code ID C2 : 100

Nb. Of Invalid C1 : 20
Nb. Of Invalid C2 : 16
Nb. Of Invalid : 7

Perfect match code : 62

	C1	C2	PoM
Accuracy :	52.571%	55.866%	73.404%

OTI

Acceptance Tests Form

MOVE 164

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-26	04:23:35	164	00:03:35	153	153

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
HLCU 212215 4	HLCU 212215 4	TTCU 272275 4	GECU 232205 4	ZLCU 212215 4	0	0	0				12	11
TGHU 213473 1	TGHU 213473 1				0	0	0				17	15
OCLU 568270 7	OCLU 568270 4				0	0	0	1			18	16
PONU 071917 0	PONU 071913 0	PONU 071919 0	PONU 079913 0	PONU 071919 0	1	1	0				20	19
MWCU 614289 9	MWCU 614289 9	MWCU 614249 9	MWCU 614289 9	MWCU 614289 9	1	1	1				24	22
MLCU 408897 1	MLCU 408897 1	MLCU 408897 1	MLCU 408897 1	MLCU 408897 1	1	0	1				28	25
GLDU 091165 1	GLDU 091165 1	GLDU 091165 1	GLDU 091165 1	GLDU 091165 1	1	0	0				28	25
PONU 747612 3	PONU 747612 3	PONU 777612 3	PONU 717612 3	PONU 147612 3	0	0	0				31	29
KNLU 507914 3	KNLU 507914 3	TTTT 577717 7	INLU 507911 3	INLU 509143 9	0	0	0				31	29
GLDU 401756 9	GLDU 401756 9	GLDU 401756 9	GLDU 401756 9	GLDU 401756 9	1	1	1				35	33
SCMU 430583 7	SCMU 430583 7	SCMU 430583 7	SCMU 430583 7		1	1	0				40	37
SKAU 821034 7	SKAU 821034 7	SKAU 821034 7	SKAU 826034 7	SKAU 821014 7	1	0	1				44	42
HLXU 615030 8	HLXU 615030 8	HLXU 615030 8	HLXU 615030 8	HLXU 615030 8	1	1	1				48	46
HLCU 417338 2	HLCU 417338 2	HLCU 417338 2	HLCU 417338 2	HLCU 417336 2	1	1	1				55	52
HLXU 443257 6	HLXU 443257 6	HLXU 443257 6	HLXU 447257 6	HLXU 443257 6	1	1	1				59	56
HLXU 451349 3	HLXU 451349 3	HLXU 451349 3	HLXU 451349 3	HLXU 451349 3	1	1	1				62	59
HLCU 403894 7	HLCU 413817 7	HCMU 361277 7	ALCU 403894 0	HCMU 361178 4	0	0	0		1		66	64
HLXU 611167 8	HLXU 611167 8	HLXU 611167 8	HLXU 611167 8	HLXU 611167 8	1	1	1				66	64
HLXU 217822 5	HLXU 217822 5			HLXU 217822 5	0	0	1				69	68
HLXU 211508 4	HLXU 211508 4	HLXU 211508 4	HLXU 211508 4		1	1	0				70	69
HLXU 453544 5	HLXU 453544 5	HLXU 453544 5	CHLU 451544 5	HLCU 453544 5	0	0	0	1			70	68
HLCU 212507 1	HLCU 212507 1	HLCU 212457 1		HLCU 212457 1	0	0	0				73	72
TGHU 218316 6	TGHU 218316 6	TGHU 218316 6	TGHU 218316 6	TGHU 210787 8	1	1	0				75	73
HGMU 066816 1	PGMU 066836 1	POCU 447221 5	POCU 44;221 5	PGMU 066816 1	0	0	1				78	76
POCU 029457 1	POCU 029457 1				0	0	0				79	78
GXXU 236092 8	GXXU 236092 8	GXXU 236092 8		GIXU 236092 8	1	0	0				81	80
SCMU 203619 5	SCMU 203619 5	SCMU 203618 5	SCMU 203619 5		1	1	0				82	81
TGHU 216767 7	TGHU 216767 7				0	0	0	1	1	1	88	87
TRIU 385197 8	TRIU 385197 8	TRIU 385197 8	TRIU 885197 8		1	1	0				89	88
FSCU 321776 7	FSCU 321776 7	FSCU 321776 7	FSCU 321776 7	FSCU 321776 7	1	1	1				91	90
	YTMU 152587 7				0	0	0	1	1	1		91
CAXU 859872 5	CAXU 859872 5	CAXU 859872 5	CAXU 859872 5	CAXU 959872 5	1	1	1				102	100
SKAU 784053 1	SKAU 784053 1	SKAU 784053 1	SKAU 784059 9	SKAU 784053 1	1	0	1	1			109	107
SAMU 220916 6	SAMU 220916 6	SAMU 220916 6		SAMU 220916 6	1	0	1				112	111
FSCU 228248 0	FSCU 228248 0	FFSU 228249 0	FSCU 228248 5		1	1	0				113	112
CAXU 252009 4	CAXU 252009 4	CAXU 252009 4		CAXU 252009 4	1	0	1				115	114
MSKU 201965 4	MSKU 201965 4	MSKU 201965 4	MSKU 201965 4		1	1	0				116	115
NYKU 242750 0	NYKU 242750 0	NYKU 242750 0		NYKU 242710 0	1	0	1				119	118
MSKU 211147 8	MSKU 211147 8	MSKU 211147 8	MSKU 211147 8		1	1	0				120	119
MAKU 698741 4	MAKU 698741 4	MAKU 698741 4		MAKU 698741 4	1	0	1				122	121
MSKU 213863 2	MSKU 213863 2				0	1	0				124	123
MSKU 233378 9	MSKU 233378 9	MSKU 2333033	MSKU 213863 2	MSKU 233378 9	0	0	1				126	125
MSKU 202606 2	MSKU 202606 2	MSKU 202606 2	MSKU 202606 2		1	1	0				127	126
TRIU 527215 4	TRIU 527215 4	TRIU 527215 4	TRIU 527215 4	TRIU 527215 4	1	1	1				131	129
TTNU 222766 6	TTNU 222766 6	TTNU 222766 6		TTNU 222766 6	1	0	0				146	144
MAKU 776211 3	MAKU 776211 3	MAKU 776211 3	MAKU 776211 3	MAKU 776211 3	1	1	0		1		147	145

Nb. of containers : 46

Match Code ID : 31

Match Code ID C1 : 22

Match Code ID C2 : 20

Nb. Of Invalid C1 : 5

Nb. Of Invalid C2 : 4

Nb. Of Invalid : 2

Perfect match code : 10

	C1	C2	PoM
Accuracy :	53.659%	47.619%	70.455%

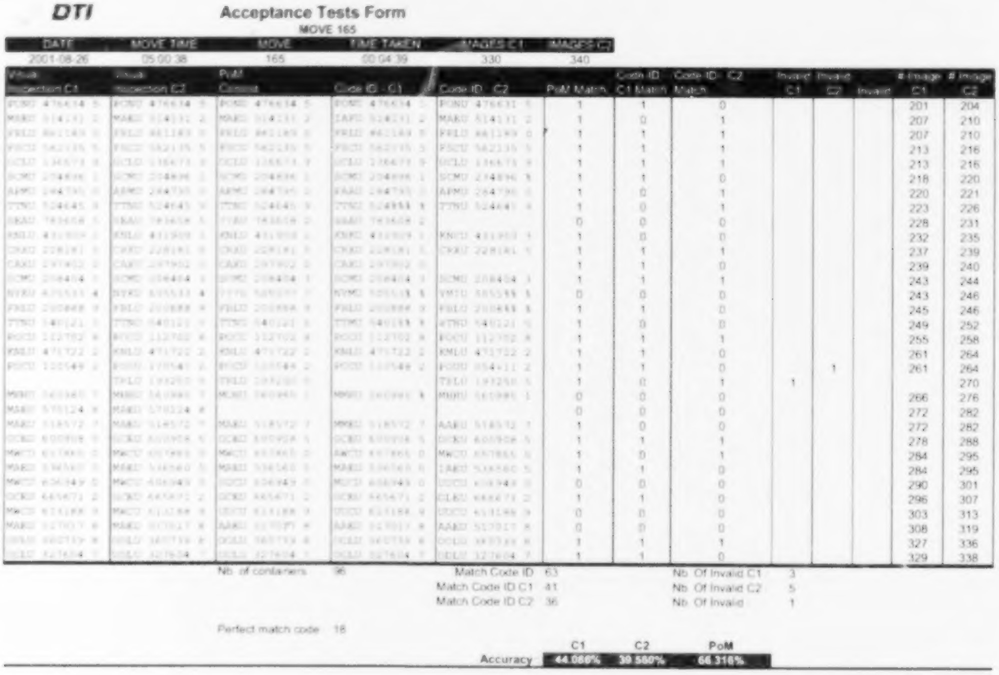
DTI

Acceptance Tests Form

MOVE 165

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-26	05:00:38	165	00:04:39	330	340

Visual Inspection C1	Visual Inspection C2	PdM Correct	Code ID C1	Code ID C2	PdM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
HLXU 217739 0	HLXU 217739 0				0	0	0				10	12
OOLU 345800 0	OOLU 345800 0				0	0	0				12	14
HLCU 209740 5	HLCU 209770 5				0	0	0		1		15	17
OOLU 318571 2	OOLU 318571 2				0	0	0				17	19
OOLU 317399 0	OOLU 317399 0				0	0	0				26	27
HLCU 215591 8	HLCU 215591 9				0	0	0				27	29
OOLU 347180 3	OOLU 347180 3				0	0	0				31	32
OOLU 346064 5	OOLU 346064 5				0	0	0				32	34
HLXU 425633 2	HLXU 425633 2				0	0	0				37	40
HLCU 424729 5	HLCU 424729 5	HLCU 424729 5	HLCU 424729 5	MLCU 424729 3	1	1	0				47	50
HLCU 223269 7	HLCU 227269 7	HLCU 223269 7	HLCU 223268 7	HLCU 229269 7	1	1	0		1		53	54
HLXU 301660 9	HLXU 301660 9	HLXU 301640 9	MLXU 301660 9	HLXU 301640 9	1	0	1				54	56
HLXU 607905 1	HLXU 607905 1	HLXU 607905 1	HLXU 607909 1	HLXU 607905 1	1	1	1				62	65
HLXU 467098 7	HLXU 467098 7	HLXU 467097 7	HLXU 467099 9	HLXU 467098 9	0	0	0	1	1	1	72	76
HLXU 234247 3	HLXU 234247 3				0	0	0				78	80
HLXU 416230 0	HLXU 416230 0				0	0	0				78	81
HLXU 233550 9	HLXU 233550 8				0	0	0				80	81
HLXU 204573 1	HLXU 204573 1	HLXU 204573 1	HLXU 204573 1	HLXU 204573 1	1	1	1				84	86
HLXU 238318 0	HLXU 238318 0	HLXU 238318 0	HLXU 238318 0	MLXU 238318 0	1	1	0				86	87
HLCU 265382 2	HLCU 265382 2				0	0	0				90	92
HLXU 460042 7	HLXU 460042 7	HLXU 460042 7	HLXU 460042 7	HLXU 465042 7	1	0	1				90	93
HLXU 261466 9	HLXU 261466 9	HLXU 261446 9	HLXU 261486 9	HLXU 261466 9	0	0	1				92	93
HLXU 221757 4	HLXU 221757 4	HLXU 221757 4	HLXU 221757 0	HLXU 221757 4	1	0	1				96	97
HLCU 405497 4	HLCU 405497 4	HLCU 405497 4	HLCU 405497 4	MLCU 054976 5	1	1	0				96	99
HLCU 209251 1	HLCU 209251 1	HLCU 209277 1	HLCU 209251 1	HLCU 209251 1	0	0	0				97	99
HLXU 223457 1	HLXU 223457 1	HLXU 223457 1	HLXU 223457 1		1	1	0				102	103
HLXU 609025 6	HLXU 609025 6	HLXU 609025 6	HLXU 609025 6	HLXU 609025 6	1	1	1				102	105
HLXU 215071 6	HLXU 215071 6	HLXU 215071 6	HLXU 215071 6	MLXU 215071 6	1	1	0				103	105
HLCU 216918 8	HLCU 216918 8	HLCU 238918 8	FLCU 216918 8	HLCU 216918 8	1	0	1				107	108
HLXU 501990 5	HLXU 501990 5	HLXU 501990 5	HLXU 501990 5	HLXU 501990 5	1	1	1				107	110
HLXU 230811 8	HLXU 230811 8	HLXU 230811 8	HLXU 230811 8	HLXU 230811 8	1	1	1				108	110
HLCU 240600 0	HLCU 240600 0	HLCU 243600 0	HLCU 240600 0	HLCU 210600 0	1	1	0				112	113
HLCU 402100 8	HLCU 402170 8	HLCU 402100 8	HLCU 402180 8	HLCU 402108 5	0	0	0		1		112	115
HLCU 218711 8	HLCU 218751 8	HLCU 218711 8	HLIU 218711 8	HLCU 218711 3	1	1	0				113	115
YLCU 214001 3	HLCU 214001 3	HLCU 214001 3	ALIU 214001 3	HLCU 214001 3	1	0	1	1			121	123
HLXU 461517 6	HLXU 461517 6	HLXU 461517 6	HLXU 461517 6	HIXU 461527 6	1	1	0				121	124
HLXU 236950 9	HLXU 236950 9	HLXU 236900 9	HLXU 236950 9	HLXU 236990 9	1	1	1				123	124
PRSU 230903 4	PRSU 230903 4	PRSU 410904 7	PRSU 410904 5		0	0	0				127	129
MAEU 677666 3	MAEU 677666 3	TTTU 677666 7	MAEU 677666 5	FIIU 677666 5	0	0	0				129	130
CAXU 601998 5	CAXU 601998 5				0	0	0				132	133
MSKU 213285 0	MSKU 213285 0				0	0	0				133	135
GSTU 449661 6	GSTU 449661 6				0	0	0				135	137
GATU 541632 1	GATU 541632 1				0	0	0				137	139
TTNU 460456 6	TTNU 460456 6	TTNU 463836 0	TTNU 460656 5		0	0	0				140	144
TTNU 986499 0	TTNU 986499 0	TTNU 986499 0	TTNU 986499 0	TTNU 986499 0	1	1	1				140	144
TTNU 926049 7	TTNU 926049 7	TTNU 926049 7		ATNU 926049 7	1	0	0				146	150
TTNU 957694 0	TTNU 957694 0	TTNU 957694 0	TTIU 957555 5	TTNU 957694 0	1	0	1				146	150
SEAU 875161 6	SEAU 875161 6	SEAU 875161 6	SEAU 875161 9	SEAU 875161 6	1	0	1				152	155
PONU 151490 4	PONU 151490 4	PONU 151490 4	PONU 151490 4	PONU 151490 4	1	1	1				152	155
MSKU 229308 0	MSKU 229308 0	MSKU 229308 0	ASKU 229308 0	MSKU 229308 0	1	0	1				158	160
KNLU 319455 4	KNLU 319455 4	KNLU 319455 4	XNLU 319455 4	CNLU 317145 5	1	0	0				160	161
MSKU 207407 6	MSKU 207407 6	MSKU 217107 6	MSKU 207107 6	MSKU 217107 1	0	0	0				164	166
OCLU 144922 1	OCLU 144922 1	OCLU 144922 1	OCLU 144922 0	CLIU 144192 2	1	1	0				164	167
MAEU 673256 2	MAEU 673256 2	MAEU 673256 2	MAEU 473255 2	MAEU 473256 5	1	1	0				166	167
PUCU 471257 7	PUCU 471257 7	POCU 471257 0	POCU 471257 5	OOCU 471257 5	0	0	0				171	174
TTNU 511700 3	TTNU 511700 3	TTNU 511700 3	TTNU 511700 3	TTNU 511700 3	1	1	0				171	174
MAEU 577855 1	MAEU 577855 1	MAEU 577855 1	MAEU 577855 0	MAEU 577855 3	1	1	1				177	180
PONU 718337 8	PONU 718337 8	PONU 718197 8	PONU 718337 8	PONU 718397 8	1	0	1				177	180
PONU 478462 6	PONU 478462 6	PONU 478462 6	PONU 478462 6		1	1	0				183	186
PONU 742776 7	PONU 742776 7	PONU 742776 7	PONU 742776 7		1	1	0				183	186
CRLU 522121 6	CRLU 522121 6	CRLU 522121 6	CRLU 522121 6	CRLU 522121 6	1	1	1				189	192
CRLU 912177 1	CRLU 912177 1	CRLU 912177 1	LRIU 912127 1	CRLU 912177 1	1	0	1				189	192
MAEU 579756 9	MAEU 579756 9	MAEU 579756 9		MAEU 579756 9	1	0	1				195	198
MAEU 515370 8	MAEU 515370 8	MAEU 515370 9	SAEU 515371 1	MAEU 515370 9	1	0	1				201	204



DTI

Acceptance Tests Form

MOVE 165

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-26	05:00:38	165	00:04:39	330	340

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				201	204
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				207	210
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				207	210
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				213	216
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				213	216
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				218	220
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				220	221
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				223	226
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				228	231
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				232	235
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				237	239
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				239	240
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				243	244
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				243	246
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				245	246
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				249	252
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				255	258
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				261	264
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0		1		261	264
	[illegible]	[illegible]		[illegible]	1	0	1	1				270
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				266	276
[illegible]	[illegible]				0	0	0				272	282
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				272	282
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				278	288
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				284	295
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				284	295
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				290	301
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				296	307
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				303	313
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				308	319
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				327	336
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				329	338

Nb. of containers	36	Match Code ID	63	Nb. Of Invalid C1	3
		Match Code ID C1	41	Nb. Of Invalid C2	5
		Match Code ID C2	36	Nb. Of Invalid	1
Perfect match code	18				

	C1	C2	PoM
Accuracy	44.086%	39.560%	66.316%

DTI

Acceptance Tests Form

MOVE 168

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-27	04:04:24	168	00:04:00	127	126

Visual Inspection C1	Visual Inspection C2	PoM Consol	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
GSTU 934620 0	GSTU 934620 0	GSTU 934620 0	GSTU 934620 0	GSTU 934640 0	1	1	0				13	9
OOLU 322518 4	OOLU 322518 4			OOLU 322518 4	0	0	1				31	28
OOLU 349011 0	OOLU 349011 0	OOLU 342018 0	OOLU 349011 0		0	1	0				32	29
OOLU 718044 7	OOLU 718044 7	OOLU 718044 7	OOLU 718044 7	OOLU 718044 7	1	1	1				37	32
OOLU 503333 9	OOLU 503333 9	OOLU 503333 9	OOLU 503333 9		1	1	0				49	45
HLCU 203677 9	HLCU 203677 9	HLCU 203677 9		HLCU 203677 9	1	0	1				53	49
HLXU 214008 7	HLXU 214008 7	HLXU 214008 7	HLXU 214008 7		1	1	0				54	51
MSKU 814095 6	MSKU 814095 6	MSKU 814095 6	MSKU 814095 6	MSKU 814095 6	1	1	1				72	68
MAEU 815141 7	MAEU 815141 7	MAEU 815711 7	MAEU 815+11 7	MAEU 815111 7	0	0	0				72	68
TRLU 409032 8	TRLU 409032 8	TRLU 409032 8	4RLU 409032 8	TRLU 409032 8	1	0	1				75	71
TRLU 608424 1	TRLU 608424 1	TRIU 608424 9	TRIU 608424 1	TRIU 608424 1	0	0	0				75	71
TRIU 024145 9	TRIU 024145 9			TRIU 024145 9	0	0	1				78	75
TRIU 023045 4	TRIU 023045 4	TRIU 023045 4	TRIU 023045 4		1	1	0				79	76
PONU 475657 9	PONU 475657 9	PONU 475657 9	PONU 475657 9	PONU 475651 9	1	1	1				83	79
POCU 470739 6	POCU 470739 6	TPCU 470739 6	IIBU 45+325 5	TPCU 470739 6	0	0	0				83	79
MAEU 573268 1	MAEU 573268 1	MAEU 573268 1	MAEU 573268 1	MAEU 573268 6	1	1	0				87	83
PONU 473316 7	PONU 473316 7	PONU 473316 7	PONU 473316 7	PONU 473316 7	1	1	1				87	83
CRLU 514012 0	CRLU 514012 0	CPLU 514012 0	CRLU 514012 0	CRLU 514012 0	1	1	1				92	88
PONU 473205 2	PONU 473205 2	PONU 473205 2	PONU 473205 2	PONU 473205 2	1	1	1				92	88
TRIU 846313 3	TRIU 846313 3	TRIU 846313 3	TRIU 846313 3	TRIU 846313 3	1	1	1				96	92
PONU 476698 3	PONU 476698 3	PONU 476698 3	PONU 476698 3	PONU 476698 3	1	1	1				96	92
PONU 477754 5	PONU 477754 5	PONU 477754 5	PONU 477754 5	PONU 477754 5	1	1	1				100	96
POCU 471159 1	POCU 471159 1	POCU 471159 1	POCU 471159 1	POCU 471159 1	1	1	1				105	101
PONU 476547 8	PONU 476547 8	PONU 476547 8	PONU 476547 8	PONU 416547 8	1	1	0				105	101
MAEU 556060 1	MAEU 556060 1	MAEU 556060 1	MAEU 556060 1	MAEU 556060 1	1	1	0				109	105
CRLU 110185 0	CRLU 110185 0	CRLU 110185 0	CRLU 110185 0	CRLU 110185 0	1	1	1				109	105
GCEU 664834 2	GCEU 664834 2	GCEU 664834 2	GCEU 664834 2	GCEU 664834 2	1	1	1				114	110
PONU 474257 5	PONU 474257 5	PONU 474257 5	PONU 474257 5	PONU 474257 5	1	1	1				114	110
CRLU 110046 9	CRLU 110046 9	CRLU 110046 9	CRLU 120046 9	CRLU 110046 9	1	1	1				118	114
PONU 738916 3	PONU 738916 3				0	0	0				125	122

Nb. of containers 30

Match Code ID 23

Match Code ID C1 22

Match Code ID C2 18

Nb. Of Invalid C1 0

Nb. Of Invalid C2 0

Nb. Of Invalid 0

Perfect match code 14

	C1	C2	PoM
Accuracy	73.333%	60.000%	76.667%

DTI

Acceptance Tests Form

MOVE 169

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-27	04:44:25	169	00:03:46	123	123

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
NYKU 228717 8	NYKU 228717 8				0	0	0				10	12
MSKU 210367 8	MSKU 210367 8				0	0	0				12	14
NDLU 201186 3	NDLU 201186 3				0	0	0				18	19
KNLU 322548 6	KNLU 322548 6				0	0	0				19	20
MAEU 696905 5	MAEU 696905 5				0	0	0				23	24
OCLU 419410 1	OCLU 419410 1				0	0	0				25	29
SKAU 226506 8	SKAU 226506 8	SKAU 226506 8	SKAU 226506 8	SKAU 226506 8	1	1	0				29	30
PONU 013676 8	PONU 013676 8	PONU 013676 8		PONU 013676 8	1	0	1				31	32
CAXU 206268 5	CAXU 206268 5	CAXU 206268 5	CAXU 206288 5	CAXU 206268 5	1	0	1				34	36
PONU 072817 3	PONU 072817 3	PONU 072817 3		PONU 072817 3	1	0	1				36	37
PCVU 133020 7	PCVU 133020 7	PCVU 133020 7	PCVU 133020 7	PCVU 133020 7	1	1	0				40	41
APMU 275056 9	APMU 275056 9	APMU 275056 9	APMU 275056 9	APMU 275056 9	1	1	1				41	43
GSTU 233913 1	GSTU 233913 1	GSTU 233913 1		GSTU 233913 1	0	0	0				46	47
CMBU 218491 2	CMBU 218491 2	CMBU 218491 2	CMBU 218491 2	CMBU 218491 2	1	1	0				47	49
DAYU 213293 5	DAYU 213293 5	DAYU 213293 5	DAYU 213293 5	DAYU 213293 5	1	1	1				52	53
TTNU 252389 0	TTNU 252389 0	TTNU 252389 0	TTNU 25+389 0	TTNU 252389 0	0	0	0	1			53	55
ICCU 081921 2	ICCU 081921 2				0	0	0	1	1	1	58	59
TEXU 244414 8	TEXU 244414 8	TEXU 244414 8	TEXU 244414 8	TEXU 244414 8	1	1	1				59	60
DCLU 418781 9	DCLU 418781 9	DCLU 418781 9	DCLU 418781 9	DCLU 418781 9	0	0	0				63	65
APMU 275096 0	APMU 270096 0	APMU 727509 6	APMU 727509 6	APMU 727509 6	0	0	0				65	66
SKAU 787131 1	SKAU 787131 1	SKAU 787131 1		SKAU 787131 1	0	0	0				68	71
MSKU 809244 1	MSKU 809244 1	MSKU 809244 1	MSKU 809244 1	MSKU 809244 1	1	1	1				73	76
TTNU 383905 1	TTNU 383905 1	TTNU 383905	TTNU 383905 8		0	0	0				78	81
INBU 301244 7	INBU 301244 7	INBU 301244 7	INBU 301244 7	INBU 301244 7	1	1	1				82	84
KNLU 313436 5	KNLU 313436 5	KNLU 313436 5	KNLU 313436 5	KNLU 313436 5	1	0	1				84	85
PONU 718113 8	PONU 718113 8	PONU 718113 8	PONU 718113 8	PONU 718113 8	1	1	1				88	91
MSKU 201491 0	MSKU 201491 0	MSKU 201491 0	MSKU 201491 0	MSKU 201441 5	1	1	0				93	94
POCU 048512 5	POCU 048512 5	POCU 048512 5	POCU 048512 5	POCU 048512 5	1	1	1				95	96
NYKU 659569 3	NYKU 659569 3	NYMU 659596 1	NYMU 659569 1	NYMU 659549 1	0	0	0				97	100
MAEU 602875 8	MAEU 602875 8	MAEU 602875 8	MAEU 602875 8		1	1	0				101	105
TRIU 474124 1	TRIU 474124 1	TRIU 474124 1	TRIU 474124 1	TRIU 474124 1	1	1	1				106	109
NYKU 243087 0	NYKU 243087 0	NYKU 308707 7	NYKU 308707 0	NYKU 308207 0	0	0	0				112	113
GSTU 461974 8	GSTU 461974 8				0	0	0	1			116	117
OCLU 140251 7	OCLU 140251 7	MCLU 402511 7	MCLU 402510 7	MCLU 402511 7	0	0	0				116	119
CLHU 236176 5	CLHU 236176 5	CLHU 236176 5	CLHU 236176 5	CLHU 236176 5	1	1	1				117	119
SKAU 230485 8					0	0	0		1		123	
DAYU 421567 0					0	0	0		1		123	

Nb. of containers 37

Match Code ID 18
Match Code ID C1 14
Match Code ID C2 13

Nb. Of Invalid C1 3
Nb. Of Invalid C2 3
Nb. Of Invalid 1

Perfect match code 9

	C1	C2	PoM
Accuracy	41.176%	38.235%	50.000%

DTI

Acceptance Tests Form

MOVE 168

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-27	04:04:24	168	00:04:00	127	126

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
GSTU 934620 0	GSTU 934620 0	GSTU 934620 0	GSTU 934620 0	GSTU 9346+0 0	1	1	0				13	9
OOLU 322518 4	OOLU 322518 4			OOLU 322518 4	0	0	1				31	28
OOLU 349011 0	OOLU 349011 0	OOLU 342018 0	OOLU 349011 0		0	1	0				32	29
OOLU 718044 7	OOLU 718044 7	OOLU 718044 7	OOLU 718044 7	OOLU 718044 7	1	1	1				37	32
OOLU 503333 9	OOLU 503333 9	OOLU 503333 9	OOLU 503333 9		1	1	0				49	45
HLCU 203877 9	HLCU 203877 9	HLCU 203877 9		HLCU 203877 9	1	0	1				53	49
HLXU 214008 7	HLXU 214008 7	HLXU 214008 7	HLXU 214008 7		1	1	0				54	51
MSKU 814095 6	MSKU 814095 6	MSKU 814095 6	MSKU 814095 6	MSKU 814095 6	1	1	1				72	68
MAKU 815141 7	MAKU 815141 7	MAKU 815711 7	MAKU 815+11 7	MAKU 815111 7	0	0	0				72	68
TRLU 409032 9	TRLU 409032 9	TRLU 409032 9	#RLU 409032 8	TRLU 409032 9	1	0	1				75	71
TRLU 608424 3	TRLU 608424 3	TRIU 608424 9	TRIU 608424 3	TRIU 608424 3	0	0	0				75	71
TRIU 024145 9	TRIU 024145 9			TRIU 024145 9	0	0	1				78	75
TRIU 023045 4	TRIU 023045 4	TRIU 023045 4	TRIU 023045 4		1	1	0				79	76
PONU 475657 9	PONU 475657 9	PONU 475657 9	PONU 475657 9	PONU 475657 9	1	1	1				83	79
POCU 470739 6	POCU 470739 6	TPOU 470739 6	IIBU 45+32% 1	TPCU 470739 6	0	0	0				83	79
MAKU 573268 1	MAKU 573268 1	MAKU 573268 1	MAKU 573268 1	MAKU 573268 6	1	1	0				87	83
PONU 473316 7	PONU 473316 7	PONU 473316 7	PONU 473316 7	PONU 473316 7	1	1	1				87	83
CRLU 514012 0	CRLU 514012 0	CRLU 514012 0	CRLU 514012 0	CRLU 514012 0	1	1	1				92	88
PONU 473205 2	PONU 473205 2	PONU 473205 2	PONU 473205 2	PONU 473205 2	1	1	1				92	88
TRIU 846313 3	TRIU 846313 3	TRIU 846313 3	TRIU 846313 3	TRIU 846313 3	1	1	1				96	92
PONU 476698 3	PONU 476698 3	PONU 476698 3	PONU 476698 3	PONU 476698 3	1	1	1				96	92
PONU 477754 5	PONU 477754 5	PONU 477754 5	PONU 477754 5	PONU 477754 5	1	1	1				100	96
POCU 471159 1	POCU 471159 1	POCU 471159 1	POCU 471159 1	POCU 471159 1	1	1	1				105	101
PONU 476547 8	PONU 476547 8	PONU 476547 8	PONU 476547 8	PONU 416547 8	1	1	0				105	101
MAKU 556060 1	MAKU 556060 1	MAKU 556060 1	MAKU 556060 1	NAKU 556060 1	1	1	0				109	105
CRLU 110185 0	CRLU 110185 0	CRLU 110185 0	CRLU 110185 0	CRLU 110185 0	1	1	1				109	105
GCEU 664834 2	GCEU 664834 2	GCEU 664834 2	GCEU 664834 2	GCEU 664834 2	1	1	1				114	110
PONU 474257 5	PONU 474257 5	PONU 474257 5	PONU 474257 5	PONU 474257 5	1	1	1				114	110
CRLU 110046 9	CRLU 110046 9	CRLU 110046 9	CRLU 110046 9	CRLU 110046 9	1	1	1				118	114
PONU 718916 3	PONU 718916 3				0	0	0				125	122

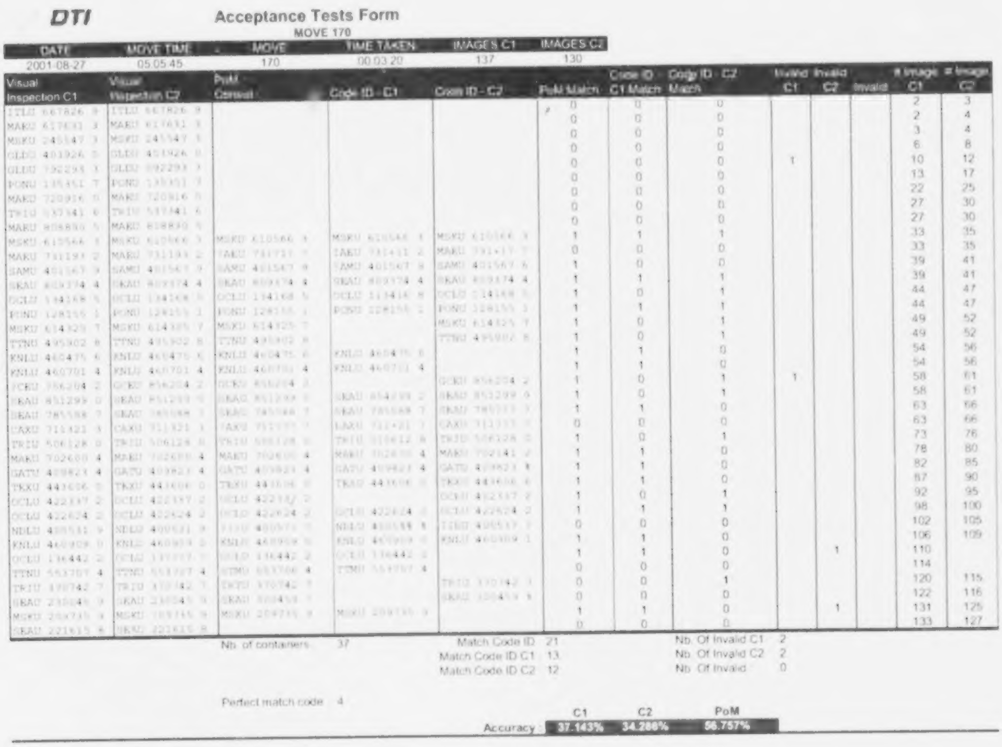
Nb. of containers 30

Match Code ID 23
Match Code ID C1 22
Match Code ID C2 18

Nb. Of Invalid C1 0
Nb. Of Invalid C2 0
Nb. Of Invalid 0

Perfect match code 14

	C1	C2	PoM
Accuracy :	73.333%	60.000%	76.667%



DTI

Acceptance Tests Form

MOVE 170

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-27	05:05:45	170	00:03:20	137	130

Visual Inspection C1	Visual Inspection C2	PoM Consent	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
ITLU 667826 9	ITLU 667826 9				0	0	0				2	3
MAKU 617631 3	MAKU 617631 3				0	0	0				2	4
MSKU 245547 3	MSKU 245547 3				0	0	0				3	4
GLDU 401926 0	GLDU 451926 0				0	0	0				6	8
GLDU 792293 3	GLDU 892293 3				0	0	0	1			10	12
PONU 135351 7	PONU 135351 7				0	0	0				13	17
MAKU 720916 0	MAKU 720816 0				0	0	0				22	25
TRIU 537341 6	TRIU 537341 6				0	0	0				27	30
MAKU 808890 5	MAKU 818830 5				0	0	0				27	30
MSKU 615566 3	MSKU 610566 3	MSKU 610566 3	MSKU 610566 1	MSKU 610566 3	1	1	1				33	35
MAKU 731193 2	MAKU 731193 2	TAKU 731737 7	TAKU 731411 2	MAKU 731+17 7	0	0	0				33	35
SAMU 401567 9	SAMU 401567 9	SAMU 401567 9	TAMU 401567 8	SAMU 401567 6	1	0	0				39	41
SKAU 809174 4	SKAU 809174 4	SKAU 809174 4	SKAU 809174 4	SKAU 809174 4	1	1	1				39	41
OCLU 134168 5	OCLU 134168 5	OCLU 134168 5	OCLU 113416 8	OCLU 134168 5	1	0	1				44	47
PONU 128155 1	PONU 128155 1	PONU 128155 1	PONU 228155 1	PONU 128155 1	1	1	1				44	47
MSKU 614325 7	MSKU 614325 7	MSKU 614325 7		MSKU 614325 7	1	0	1				49	52
TTNU 495902 8	TTNU 495902 8	TTNU 495902 8		TTNU 495902 8	1	0	1				49	52
KNLU 460475 6	KNLU 460475 6	KNLU 460475 6	KNLU 460475 6		1	1	0				54	56
KNLU 460701 4	KNLU 460701 4	KNLU 460701 4	KNLU 460701 4		1	1	0				54	56
GCKU 856204 2	GCKU 856204 2	GCKU 856204 2		GCKU 856204 2	1	0	1	1			58	61
SKAU 851299 0	SKAU 851299 0	SKAU 851299 0	SKAU 854299 2	SKAU 851299 6	1	0	1				58	61
SKAU 785588 7	SKAU 785588 7	SKAU 785588 7	SKAU 785588 7	SKAU 785333 7	1	1	0				63	66
CAXU 711421 3	CAXU 711421 3	TAKU 751333 7	LAXU 711421 7	CAXU 711333 3	0	0	0				63	66
TRIU 506128 0	TRIU 506128 0	TRIU 506128 0	TRIU 010612 8	TRIU 506128 0	1	0	1				73	76
MAKU 702600 4	MAKU 702600 4	MAKU 702600 4	MAKU 702600 4	MAKU 702141 2	1	1	0				78	80
GATU 409823 4	GATU 409823 4	GATU 409823 4	GATU 409821 4	GATU 409823 4	1	1	0				82	85
TKXU 443606 0	TKXU 443606 0	TKXU 443606 0	TKAU 443606 0	TKXU 443606 6	1	1	0				87	90
OCLU 422337 2	OCLU 422337 2	NCLU 42237/ 2		OCKU 432337 2	1	0	1				92	95
OCLU 422624 2	OCLU 422624 2	OCLU 422624 2	OCLU 422624 2	OCLU 422624 2	1	1	1				98	100
NDLU 400531 9	NDLU 400531 9	TIKU 400571 7	NDLU 400599 5	TIKU 495517 7	0	0	0				102	105
KNLU 460909 0	KNLU 460909 0	KNLU 460909 0	KNLU 460909 0	KNLU 460909 1	1	1	0				106	109
OCLU 136442 2	OCLU 137737 7	OCLU 136442 2	OCLU 136442 2		1	1	0		1		110	
TTNU 553707 4	TTNU 553707 4	STMU 553706 4	TTMU 553707 4		0	0	0				114	
TRIU 370742 7	TRIU 370742 7	TKTU 370742 7		TRIU 370742 1	0	0	1				120	115
SKAU 230045 9	SKAU 230045 9	SKAU 330459 7		SKAU 330459 5	0	0	0				122	116
MSKU 209735 9	MSKU 209735 9	MSKU 209735 9	MSKU 209735 9		1	1	0		1		131	125
SKAU 221615 8	SKAU 221615 8				0	0	0				133	127

Nb. of containers : 37

Match Code ID : 21
Match Code ID C1 : 13
Match Code ID C2 : 12

Nb. Of Invalid C1 : 2
Nb. Of Invalid C2 : 2
Nb. Of Invalid : 0

Perfect match code : 4

	C1	C2	PoM
Accuracy :	37.143%	34.286%	56.757%

OTI

Acceptance Tests Form

MOVE 200

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-30	03:46:33	200	00:07:48	310	311

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
HLCU 201216 0	HLCU 201278 0				0	P	0		1		11	10
HLXU 220928 6	HLXU 220928 6	HLXU 220928 6	HLXU 220928 6	HLCU 204208 0	1	1	0				12	11
OOLU 316911 5	OOLU 316711 5				0	0	0		1		15	14
OOLU 314101 5	OOLU 314101 5	OOLU 314101 5	OOLU 314101 5	OOLU 316111 9	1	1	0				16	15
HLXU 434908 1	HLXU 434908 1	HLXU 434908 1	HLXU 434908 1	HLXU 414908 1	1	1	1				20	18
HLXU 600545 0	HLXU 600545 0	HLXU 600545 0	HLXU 600545 0	HLXU 600545 0	1	1	1				20	18
PONU 743290 6	PONU 743290 6				0	0	0				27	25
MSKU 605503 2	MSKU 605503 2	MSKU 605503 2	MSKU 605503 2	MSKU 605503 2	1	1	1				30	28
PONU 713142 0	PONU 713142 0	PONU 713142 0	PONU 713142 0	PONU 713142 0	1	1	1				33	31
MSKU 800443 5	MSKU 800443 5	MSKU 800443 5	MSKU 800443 5	MSKU 800443 5	1	1	1				36	34
TEXU 464502 8	TEXU 464502 8	TEXU 464502 8	TEXU 464502 8		1	1	0				40	38
MSAU 561134 8	MSAU 561134 8	MSAU 561134 8	MSAU 561134 8		1	1	0				40	38
PONU 711510 0	PONU 711510 0	PONU 711510 0	PONU 711510 0	PONU 711510 0	1	1	1				45	42
TTNU 950805 3	TTNU 950805 3				0	0	0				45	42
TEXU 730107 6	TEXU 730107 6	TEXU 730107 6	TEXU 730107 6	TEXU 730107 6	1	1	1				49	47
SKAU 809801 7	SKAU 809801 7	SKAU 809801 7	SKAU 809801 7	SKAU 809801 7	1	1	1				49	47
UXXU 229357 0	UXXU 229357 0	UXXU 229357 0		UXXU 229357 0	1	0	1				52	51
???? ?????? ?	GSTU 463696 0				0	0	0	1			53	52
NUKU 542018 1	NUKU 542018 1	NYKU 542018 1	NYKU 542018 1	NYKU 542018 1	0	0	0				57	55
???? 603562 7	MWCU 603562 7	???? 603562 7		MJCU 603562 7	0	0	0	1			57	55
TTNU 922157 2	TTNU 922157 2	TTNU 922157 2	TTNU 922157 2	TTNU 922157 2	1	1	1				66	63
MAKU 806439 6	MAKU 806439 6	MAKU 806439 6	MAKU 806439 6	MAKU 806439 6	1	1	1				69	67
MAKU 816753 7	?AKU 716753 7	MAKU 816753 7	MAKU 816753 7	MLLU 816753 7	1	1	0		1		73	70
MAKU 826905 6	MAKU 826905 6	MAKU 826905 6	MAKU 826905 6		1	1	0				76	74
MSKU 808069 3	MSKU 808069 3	MSKU 808069 3	MSKU 808069 3	MAKU 808069 3	1	1	1				79	77
FSCU 614722 0	FSCU 614722 0	FSCU 614722 0	FSCU 614722 0	FSCU 614722 0	1	1	1				89	87
OCLU 793150 7	OCLU 793150 7	OCLU 793150 7		OCLU 793150 7	1	0	1				93	91
FRLU 961007 6	FRLU 961007 6	FRLU 961007 6	FRLU 961007 6	FRLU 961007 6	1	1	1				98	96
MSKU 607401 1	MSKU 607401 1	MSKU 607401 1	MSKU 607401 1	MSKU 607401 1	1	1	1				102	100
MWCU 613046 0	MWCU 613046 0	MWCU 613046 0	MWCU 613046 0		1	1	0				134	133
MWCU 443066 7	MWCU 443066 7				0	0	0				134	133
MAKU 570990 6	MAKU 570990 6	MAKU 570990 6	?CUU 570990 6	MAKU 570990 6	1	0	1				139	137
MWCU 657622 0	MWCU 657622 0	MWCU 657622 0	MWCU 657632 0	MWCU 657632 0	1	1	1				139	137
ZCSU 501775 2	ZCSU 501775 2	ZCSU 501775 2		ZCSU 501775 2	1	0	1				143	142
MAKU 580089 4	MAKU 580089 4	MAKU 580089 4	MAIU 580089 4	MAKU 5800?9 4	1	0	1				143	142
CNCU 000859	CNCU 000859	CSLU 330859 3	CSLU 880859 5		0	0	0				148	164
MAKU 517286 4	MAKU 517286 4	MAKU 517286 4		MAKU 517286 4	1	0	1				151	150
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	164	164
MSKU 711?58 5	MSKU 711758 5				0	0	0	1	1	1	165	165
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	167	166
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	169	169
???? ?????? 4	???? ?????? ?				0	0	0	1	1	1	171	171
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	174	173
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	178	176
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	181	180
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	183	183
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	185	184
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	188	188
???? ?????? ?	???? ?????? ?				0	0	0	1	,	1	189	187
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	189	187
M??? ???6?? ?	M??? ???6?? ?				0	0	0	1	1	1	192	193
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	193	192
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	193	192
??MY ???145 5	??MY ???145 5				0	0	0	1	1	1	197	198
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	198	197
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	198	197
NOK? ?????? ?	NOK? ?????? ?				0	0	0	1	1	1	202	201
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	202	201
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	205	204
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	205	204
M??? ?????? ?	M??? ?????? ?				0	0	0	1	1	1	208	207
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	208	207
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	211	210
???? ?????? ?	???? ?????? ?				0	0	0	1	1	1	211	210

OTI

Acceptance Tests Form

MOVE 200

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-30	03:46:33	200	00:07:48	310	311

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]				0	0	0	1	1	1	214	213
[illegible]	[illegible]				0	0	0	1	1	1	214	213
[illegible]	[illegible]				0	0	0	1	1	1	216	216
[illegible]	[illegible]				0	0	0	1	1	1	219	218
[illegible]	[illegible]				0	0	0	1	1	1	221	222
[illegible]	[illegible]				0	0	0	1	1	1	222	221
[illegible]	[illegible]				0	0	0	1	1	1	222	221
[illegible]	[illegible]				0	0	0	1	1	1	225	226
[illegible]	[illegible]				0	0	0	1	1	1	226	225
[illegible]	[illegible]				0	0	0	1	1	1	226	225
[illegible]	[illegible]				0	0	0	1	1	1	230	231
[illegible]	[illegible]				0	0	0	1	1	1	231	229
[illegible]	[illegible]				0	0	0	1	1	1	231	229
[illegible]	[illegible]				0	0	0	1	1	1	235	234
[illegible]	[illegible]				0	0	0	1	1	1	235	234
[illegible]	[illegible]				0	0	0	1	1	1	239	238
[illegible]	[illegible]				0	0	0	1	1	1	242	241
[illegible]	[illegible]				0	0	0	1	1	1	246	245
[illegible]	[illegible]				0	0	0	1	1	1	250	248
[illegible]	[illegible]				0	0	0	1	1	1	252	252
[illegible]	[illegible]				0	0	0	1	1	1	253	253
[illegible]	[illegible]				0	0	0	1	1	1	256	256
[illegible]	[illegible]				0	0	0	1	1	1	257	257
[illegible]	[illegible]				0	0	0	1	1	1	261	260
[illegible]	[illegible]				0	0	0	1	1	1	261	260
[illegible]	[illegible]				0	0	0	1	1	1	265	264
[illegible]	[illegible]				0	0	0	1	1	1	270	269
[illegible]	[illegible]				0	0	0	1	1	1	274	273
[illegible]	[illegible]				0	0	0	1	1	1	279	277
[illegible]	[illegible]				0	0	0	1	1	1	279	277
[illegible]	[illegible]				0	0	0	1	1	1	282	282
[illegible]	[illegible]				0	0	0	1	1	1	282	282
[illegible]	[illegible]				0	0	0	1	1	1	287	285
[illegible]	[illegible]				0	0	0	1	1	1	287	285
[illegible]	[illegible]				0	0	0	1	1	1	291	290
[illegible]	[illegible]				0	0	0	1	1	1	291	290
[illegible]	[illegible]				0	0	0	1	1	1	296	296
[illegible]	[illegible]				0	0	0	1	1	1	300	299
[illegible]	[illegible]				0	0	0	1	1	1	308	307

Nb. of containers	103	Match Code ID	28	Nb. Of invalid C1	68
		Match Code ID C1	22	Nb. Of invalid C2	69
		Match Code ID C2	21	Nb. Of invalid	66

Perfect match code 15

	C1	C2	PoM
Accuracy	62.857%	61.765%	75.676%

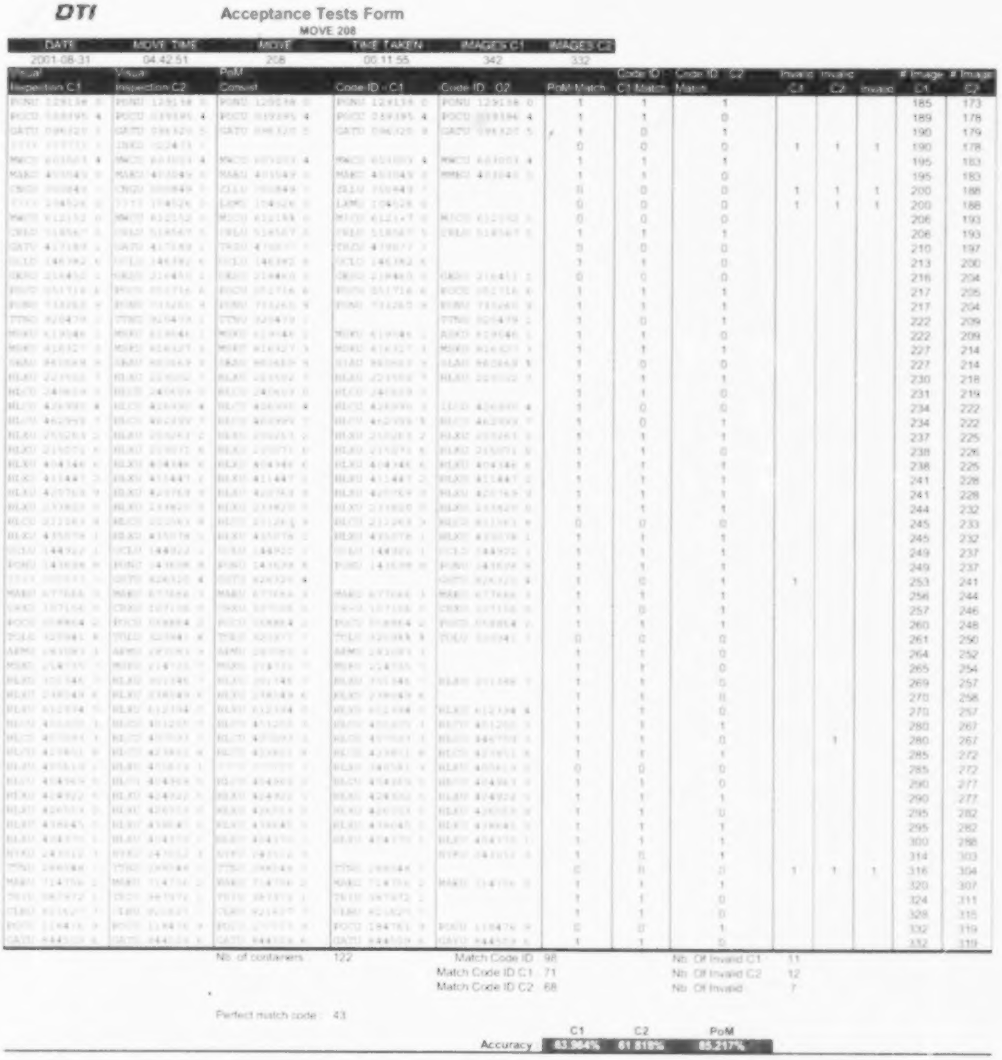
DTI

Acceptance Tests Form

MOVE 208

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-31	04:42:51	208	00:11:55	342	332

Visual Inspection C1	Visual Inspection C2	PoM Commit	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
TTNU 946210 2	TTNU 946210 0	TTNU 946210 0		TTNU 946210 0	1	0	1				15	12
STAU 816379 8	SKAU 816379 6	SKAU 816379 6	SKAU 8?6379 4	SKAU 816379 K	1	0	1	1			15	12
OCLU 702314 4	OCLU 702374 6	???? ?????? ?	OCLU 702014 8	OCLU 323469 9	0	0	0		1		20	17
TRIU 902506 8	TRIU 902506 8	LAIU 902504 3	TAIU 9?2004 9	IAIU 902506 5	0	0	0				20	17
NYKU 541202 0	NYKU 541202 0	NYKU 541202 0		NYKU 541202 0	1	0	1				26	22
PONU 720714 5	PONU 720714 5	PONU 720714 5		PONU 720714 5	1	0	1				26	22
IKAU 450936 6	IKAU 450936 6	IKAU 450936 6	IKAU 450936 8	IKAU 450936 6	1	1	1				30	27
MAEU 575024 2	MAEU 575024 2	MAEU 575024 2	ICOU 575024 2	MAEU 575024 2	1	0	1				30	27
TRLU 470557 3	TRLU 470557 3	??MU 470557 1		??MU 470557 3	0	0	0		1		35	32
APMU 557505 3	APMU 557505 3	APMU 557505 3	APMU 557505 3	APMU 557505 3	1	1	1				40	37
TRIU 568519 0	TRIU 568519 0	TRIU 568519 0	TRIU 568519 0	TRIU 568519 0	1	1	1				45	42
TEXU 726041 5	TEXU 726041 5	TEXU 726041 5	TEXU 726041 5	TEXU 726041 0	1	1	1				49	47
TRLU 289752 2	TRLU 289752 2	TRLU 289752 2	TRLU 289752 2	TRLU 289752 6	1	1	0				53	52
???? ?????? ?	CMDU 234579 2	TTNU 467221 0		TWNU 46?221 0	0	0	0	1	1	1	54	53
POCU 817711 1	POCU 817711 1	POCU 817711 1	POCU 817711 1	POCU 817711 1	1	1	1				58	57
GATU 854756 9	GATU 854756 9	GATU 854756 9	GATU 854756 9		1	1	0				59	58
KNLU 501883 8	KNLU 501883 8	KNLU 501883 8	KNLU 501883 8	KNLU 601883 8	1	1	0				64	61
TRIU 502112 2	TRIU 502112 2	TRIU 502712 2	TRIU 504112 9		1	1	0				68	
???? ?????? ?	???? ?????? ?	CSLU 714561 9		CSLU 716551 1	0	0	0	1	1	1	79	
CNGU 820875 7	CNGU 850875 7				0	0	0	1	1	1	84	
HLCU 220015 4	HLCU 220015 4	HLCU 220015 4	HLCU 220015 8	HAJU 220015 4	1	0	1				88	76
TTNU 277385 7	TTNU 277385 7	TTNU 277385 7	TTWU 277385 8	TTNU 277385 3	0	0	1	1			89	78
TEXU 450300 2	TEXU 450300 2	TEXU 450300 2	TEXU 450300 7	TEXU 450300 2	1	0	1				94	81
PONU 139288 0	PONU 139288 0	PONU 139288 0	PONU 139288 0	PONU 139288 0	1	1	1				99	86
PONU 743400 4	PONU 743400 4	PONU 743400 4	PONU 743400 4	PONU 743400 4	1	1	1				99	86
MSKU 819675 0	MSKU 819675 0	MSKU 819675 0	MSKU 819675 0	MSKU 819675 3	1	1	1				103	91
INBU 470167 2	INBU 570177 2	INBU 479167 8		INBU 479167 8	0	0	0		1		103	91
OCLU 151745 5	OCLU 151745 5	OCLU 151745 5	OCLU 151745 5	OCLU 151745 5	1	1	1				108	96
INBU 531501 5	INBU 541581 5	INBU 531501 0	INBU 531501 5	INBU 531501 6	1	1	0				108	96
KNLU 477650 9	KNLU 477650 8				0	0	0		1		113	100
MAEU 718108 2	MAEU 718108 2				0	0	0				113	100
PONU 096412 6	PONU 096412 6	PONU 096412 6	PONU 096412 6	PONU 096412 6	1	1	1				118	105
SEAU 218603 2	SEAU 218603 2	SEAU 218603 2	SEAU 218603 2	SEAU 218603 2	1	1	1				117	107
INBU 487101 0	INBU 487101 0	INBU 487101 0		INBU 487101 0	0	0	0				118	105
PONU 124779 4	PONU 124779 4	PONU 124779 4	PONU 124779 4	PONU 124779 4	1	1	1				123	110
POCU 120955 3	POCU 120955 3	POCU 120955 3	POCU 120955 3	POCU 120955 3	1	1	0				123	110
MAEU 681940 4	MAEU 681940 4	MAEU 681940 4	MAEU 681940 4	MAEU 681940 4	1	1	1				127	115
GLDU 029607 0	GLDU 029607 0	GLDU 029607 0	GLDU 029607 0	GLDU 029607 0	1	1	0				128	116
PRSU 406483 0	PRSU 406483 0	PRSU 406483 0	PRSU 406483 0	PRSU 406483 0	1	0	1				128	115
OCLU 150474 0	OCLU 150474 0	OCLU 150474 0	OCLU 150471 0	OCLU 150474 0	1	0	1				133	120
GSTU 737610 3	GSTU 737610 3	GSTU 737610 3	GSTU 737610 0	GSTU 737610 4	1	0	0				133	120
MSKU 233700 1	MSKU 233700 1	MSKU 233700 1	MSKU 233700 1	MSKU 233700 1	1	1	1				136	125
INBU 335225 7	INBU 335225 7	INBU 335225 7	IMBU 335225 7	INBU 335225 3	1	0	1				137	126
MAEU 805021 6	MAEU 805021 6	MAEU 805021 6	MAEU 805021 6	MAIU 805112 6	1	1	0				137	125
TTNU 211508 0	TTNU 211508 0	TTNU 211508 0	JTNU 211508 0	TTNU 211508 0	1	0	1				141	130
SCMU 204896 1	SCMU 204896 1	SCMU 204894 0	SCMU 204894 0		0	0	0				142	131
OCLU 153214 6	OCLU 153214 6	OCLU 153214 6	OCLU 153214 6	OCLU 532141 6	1	1	0				142	130
SEAU 225496 0	SEAU 225496 0	SEAU 225496 0	AKAU 225496 0	SEAU 225496 0	1	0	1				146	134
MAEU 775464 9	MAEU 775464 9	MAEU 775464 9	MAEU 775468 8		1	1	0				147	136
MAEU 821677 6	MAEU 821677 6	MAEU 821677 6	MAEU 821677 6	MAIU 821671 3	1	1	0				147	134
GESU 204825 0	GESU 204825 0	CASU 204175 0	GESU 204870 2	GESU 204175 0	0	0	0				151	139
POCU 540112 9	POCU 540112 9	POCU 540112 9	POCU 540112 9	POCU 540112 9	1	1	1				152	139
POCU 420609 6	POCU 420609 6	POCU 420609 6	POFU 420609 6	POCU 420609 6	1	0	1				152	141
KNLU 460689 3	KNLU 460689 3	KNLU 460689 3	KNLU 460649 3	KNLU 460689 1	1	1	1				157	144
TTNU 494902 6	TTNU 494902 6	TTNU 494902 6		TTNU 494902 6	1	0	0				165	152
MAEU 681757 2	MAEU 681757 2	MAEU 681757 2		MAEU 681757 2	1	0	1				167	156
CAXU 608644 8	CAXU 608644 8	CAXU 608644 8	CAXU 608644 0	CAXU 608644 8	1	0	1	1			169	157
PONU 143727 0	PONU 143727 0	PONU 143727 0		PONU 143727 0	1	0	1				172	159
MLCU 950116 2	MLCU 950116 2	MLCU 950116 2	MLCU 960118 2	MLCU 950116 2	1	0	1				176	163
TEXU 541658 2	TEXU 541658 2	TEXU 541658 2	TEXU 541658 2	TEXU 541658 2	1	1	1				176	163
PONU 731198 8	PONU 731198 8	PONU 731198 8	PONU 731198 8	PONU 731198 8	1	1	1				181	168
PONU 719428 5	PONU 719428 5	PONU 719428 5	PONU 719428 5	PONU 719428 5	1	1	1				181	168
POCU 113202 4	POCU 113202 4	POCU 113202 4	POCU 113202 4	POCU 113202 4	1	1	1				185	173



DTI

Acceptance Tests Form

MOVE 208

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-31	04:42:51	208	00:11:55	342	332

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				185	173
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				189	178
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				190	179
[illegible]	[illegible]				0	0	0	1	1	1	190	178
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				195	183
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				195	183
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	200	188
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	200	188
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				206	193
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				208	193
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				210	197
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				213	200
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				216	204
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				217	205
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				217	204
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				222	209
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				222	209
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				227	214
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				227	214
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				230	218
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				231	219
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				234	222
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				234	222
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				237	225
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				238	226
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				238	225
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				241	228
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				241	228
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				244	232
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				245	233
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				245	232
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				249	237
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				249	237
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1	1			253	241
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				256	244
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				257	246
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				260	248
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				261	250
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				264	252
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				265	254
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				269	257
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				270	258
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				270	257
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				280	267
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0		1		280	267
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				285	272
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				285	272
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				290	277
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				290	277
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				295	282
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				295	282
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				300	288
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				314	303
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	316	304
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				320	307
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				324	311
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				328	315
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	1				332	319
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				332	319

Nb. of containers : 122

Match Code ID : 98
Match Code ID C1 : 71
Match Code ID C2 : 68

Nb. Of Invalid C1 : 11
Nb. Of Invalid C2 : 12
Nb. Of Invalid : 7

Perfect match code : 43

	C1	C2	PoM
Accuracy	83.984%	61.818%	85.217%

DTI

Acceptance Tests Form

MOVE 209

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-08-31	05:21:10	209	00:01:35	80	80

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
TRLU 431080 1	TRLU 431080 1	TRLU 431080 1	TRLU 431080 9	TRLU 431080 1	1	0	1				7	10
TRIU 517493 9	TRIU 517493 9	TRIU 517493 9	TRIU 517493 9	TRIU 517493 9	1	1	1				16	19
MSKU 261024 0	MSKU 261024 0				0	0	0				20	21
TTNU 244759 4	TTNU 244759 4	TTNU 244759 4	TTNU 249444 9	TTNU 244759 4	1	0	1				22	23
[illegible]TU 239624 6	GSTU 239623 6	GSTU 239623 6		GSTU 2396[illegible]3 6	0	0	0	1			24	25
HLXU 205197 1	HLXU 205197 1	HLXU 205197 1	HLXU 205197 1	HLXU 205197 1	1	1	1				29	30
HLXU 462078 1	HLXU 462068 1	HLXU 462068 1	HLXU 462068 1	HLXU 462068 1	1	0	1	1			29	31
HLXU 216031 3	HLXU 216031 3	HLXU 216031 3	HLXU 216041 3	HLXU 216031 3	1	1	0				30	31
HLXU 225141 3	HLXU 225141 3	HLXU 225141 3	HLXU 225141 3	HLXU 225141 3	1	1	1				33	35
HLCU 461454 9	HLCU 461454 9	HLCU 461454 9	HLCU 461454 9	HLCU 461454 9	1	1	1				33	36
HLCU 218322 6	HLCU 218322 6	HLCU 218322 6	HLCU 218322 6	HLCU 218322 6	1	1	1				34	36
HLCU 463777 [illegible]	HLCU 463777 [illegible]	HLCU 463777 [illegible]	HLCU 463299 5	HLCU 463999 5	0	0	0	1	1	1	38	40
HLXU 436909 3	HLXU 436909 3	HLXU 436909 3	FLXU 436909 3	HLXU 436909 3	1	0	1				38	40
HLXU 412680 6	HLXU 412680 6				0	0	0				43	46
HLCU 454970 0	HLCU 454970 0				0	0	0				43	46
GATU 430409 0	GATU 430409 0	GATU 430409 0	GATU 430409 0	GATU 430409 0	1	1	1				48	51
GATU 846300 0	GATU 846300 0	GATU 846300 0	GATU 846300 0	GATU 846300 0	1	1	1				48	51
HLXU 458561 5	HLXU 458561 5	HLXU 458561 5	HLXU 458561 5	HLXU 458561 5	1	1	1				53	56
GATU 419519 4	GATU 419519 4	GATU 419519 4	GATU 419519 4	GATU 419519 4	1	0	1				53	56
HLCU 260583 0	HLCU 260583 0	HLCU 260583 0	HLCU 260583 0	HLCU 260583 0	1	0	0				58	59
HLCU 223755 4	HLCU 223755 4	HLCU 223755 4	HLCU 223755 4	HLCU 223755 4	1	1	1				60	61
HLCU 261897 7	HLCU 261897 7	HLCU 261896 7	HLCU 261896 5	HLCU 261896 5	0	0	0	1	1	1	62	64
GATU 025499 0	GATU 025499 0	GATU 025499 0	GATU 025499 0	GATU 025499 0	1	1	1				64	65
HLCU 242781 0	HLCU 242781 0	HLCU 242781 0	HLCU 242781 8	HLCU 242781 8	1	0	0				67	66
HLXU 215616 5	HLXU 215616 5	HLXU 215616 5	HLXU 215616 5	HLXU 215616 5	1	0	1				68	69
HLCU 261582 3	HLCU 261582 3	HLCU 201582 3	H+CU 201582 3	H+CU 201582 1	0	0	0	1	1	1	71	72
HLCU 260214 8	HLCU 260214 8	HLCU 260214 8	HLCU 260214 8	H+CU 260214 9	1	1	0				72	73
HLCU 260225 6	HL[illegible] 260225 6	HLCU 260225 6	HLCU 260225 6	HLIU 260225 6	1	1	0		1		75	76
HLXU 202113 3	HLXU 202113 3	HLXU 202113 3	HLXU 202113 3	HLXU 202113 3	1	1	1				77	78

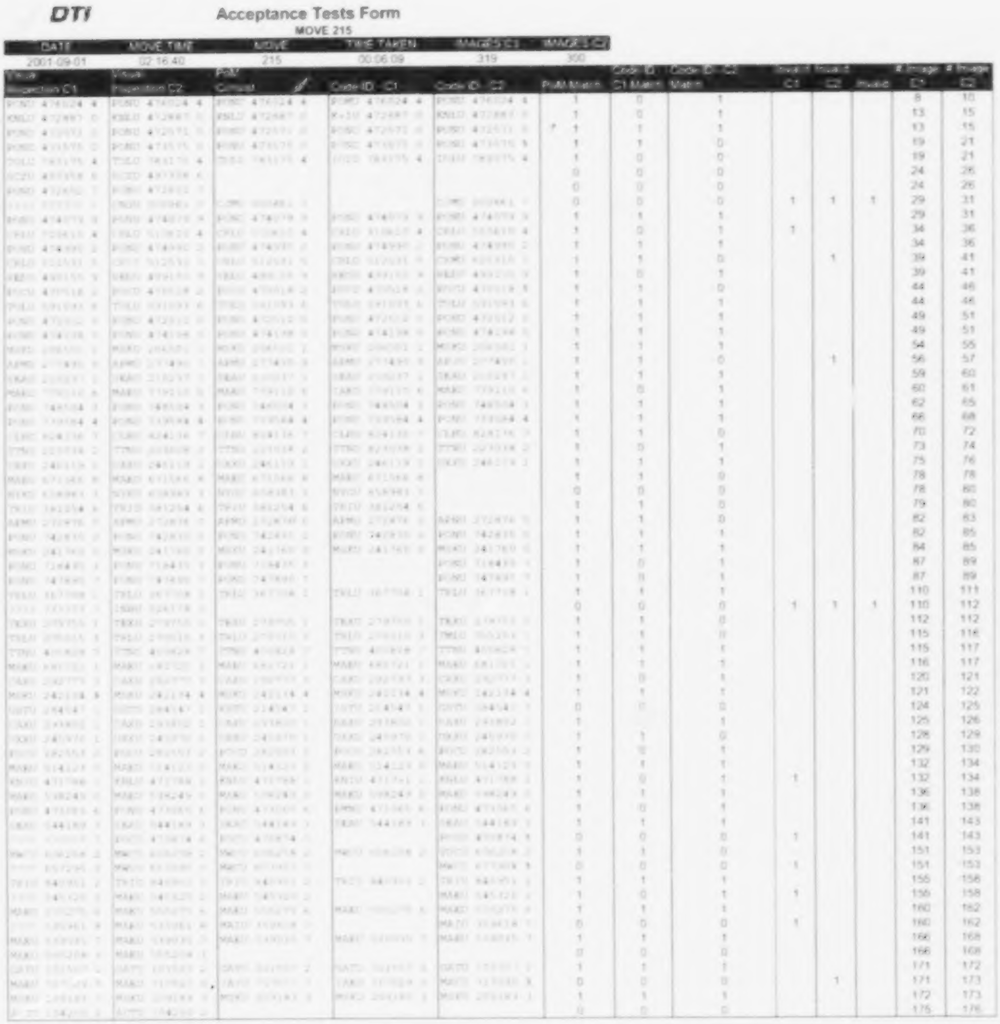
Nb. of containers 29

Match Code ID 22
Match Code ID C1 14
Match Code ID C2 17

Nb. Of Invalid C1 5
Nb. Of Invalid C2 4
Nb. Of Invalid 3

Perfect match code 11

	C1	C2	PoM
Accuracy :	58.333%	68.000%	84.615%

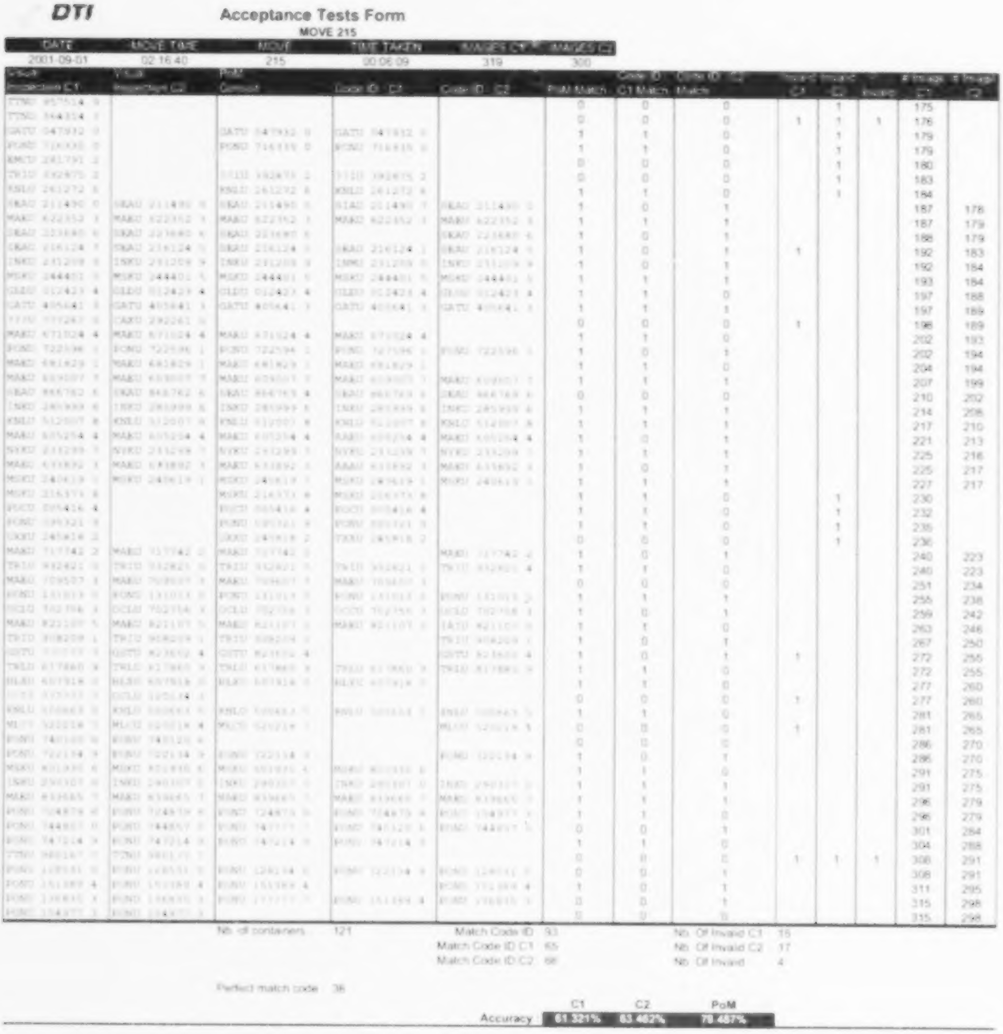


DTI

Acceptance Tests Form

MOVE 215

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-01	02:16:40	215	00:06:09	319	300



DTI

Acceptance Tests Form

MOVE 215

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-01	02:16:40	215	00:06:09	319	300

PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
0	0	0		1		175	
0	0	0	1	1	1	176	
1	1	0		1		179	
1	1	0		1		179	
0	0	0		1		180	
0	0	0		1		183	
1	1	0		1		184	
1	0	1				187	178
1	1	1				187	179
1	0	1				188	179
1	0	1	1			192	183
1	0	1				192	184
1	1	1				193	184
1	1	0				197	188
1	1	1				197	189
0	0	0	1			198	189
1	1	0				202	193
1	0	1				202	194
1	1	0				204	194
1	1	1				207	199
0	0	0				210	202
1	1	1				214	208
1	1	1				217	210
1	0	1				221	213
1	1	1				225	216
1	0	1				225	217
1	1	1				227	217
1	1	0		1		230	
1	1	0		1		232	
1	1	0		1		235	
0	0	0		1		236	
1	0	1				240	223
1	1	0				240	223
0	0	0				251	234
1	1	1				255	238
1	0	1				259	242
1	1	0				263	246
1	0	1				267	250
1	0	1	1			272	255
1	1	0				272	255
1	1	0				277	260
0	0	0	1			277	260
1	1	0				281	265
0	0	0	1			281	265
0	0	0				286	270
1	0	1				286	270
1	1	0				291	275
1	1	1				291	275
1	1	1				296	279
1	1	0				296	279
0	0	1				301	284
1	1	0				304	288
0	0	0	1	1	1	308	291
0	0	1				308	291
1	0	1				311	295
0	0	1				315	298
0	0	0				315	298

Nb. of containers 121

Match Code ID 93
Match Code ID C1 65
Match Code ID C2 68

Nb. Of Invalid C1 15
Nb. Of Invalid C2 17
Nb. Of Invalid 4

Perfect match code 36

	C1	C2	PoM
Accuracy	61.321%	63.462%	78.487%

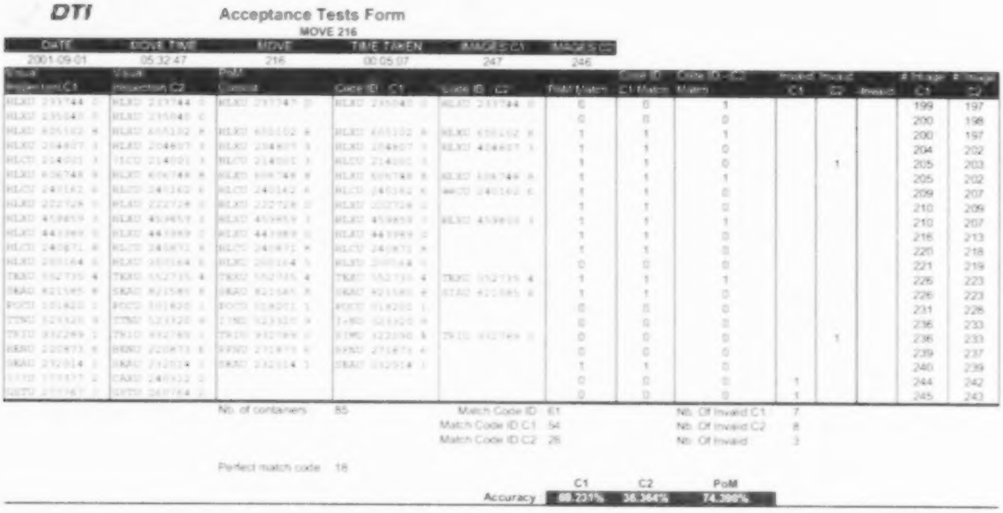
DTI

Acceptance Tests Form

MOVE 216

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-01	05:32:47	216	00:05:07	247	246

Visual Inspection C1	Visual Inspection C2	PnM Consist	Code ID - C1	Code ID - C2	PnM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				15	11
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				20	16
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				24	21
[illegible]	[illegible]				0	0	0				29	26
[illegible]	[illegible]				0	0	0	1	1	1	34	30
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				37	35
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				48	45
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				52	49
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				53	51
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				53	49
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				57	55
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				62	59
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0		1		62	59
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				65	63
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				66	64
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	66	63
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				84	80
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				88	84
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				91	89
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				93	91
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				108	104
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				108	104
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				112	109
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1	1			112	109
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				116	113
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				116	113
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				120	117
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				120	117
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				124	120
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				124	120
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				128	125
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	1	0				128	125
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				133	129
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				133	129
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				136	133
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0		1		136	133
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				140	138
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				141	139
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				141	138
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				145	143
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				147	144
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				147	143
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				150	148
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				151	149
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				151	148
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				155	153
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				156	154
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0		1		156	153
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				161	158
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				161	158
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				165	163
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				166	164
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				166	163
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				170	168
[illegible]	[illegible]				0	0	0	1			171	169
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				171	168
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				175	172
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				180	177
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				180	177
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	185	182
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				185	182
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				190	187
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	1	0				190	187
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				195	192



DTI

Acceptance Tests Form

MOVE 216

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-01	05:32:47	216	00:05:07	247	246

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	1				199	197
[illegible]	[illegible]				0	0	0				200	198
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				200	197
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				204	202
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0		1		205	203
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				205	202
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				209	207
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				210	209
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				210	207
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				216	213
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				220	218
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				221	219
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				226	223
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				226	223
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				231	228
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				236	233
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0		1		236	233
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				239	237
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				240	239
[illegible]	[illegible]				0	0	0	1			244	242
[illegible]	[illegible]				0	0	0	1			245	243

No. of containers 85

Match Code ID 61
Match Code ID C1 54
Match Code ID C2 28

Nb. Of Invalid C1 7
Nb. Of Invalid C2 8
Nb. Of Invalid 3

Perfect match code 18

	C1	C2	PoM
Accuracy	69.231%	36.364%	74.390%

DTI

Acceptance Tests Form

MOVE 217

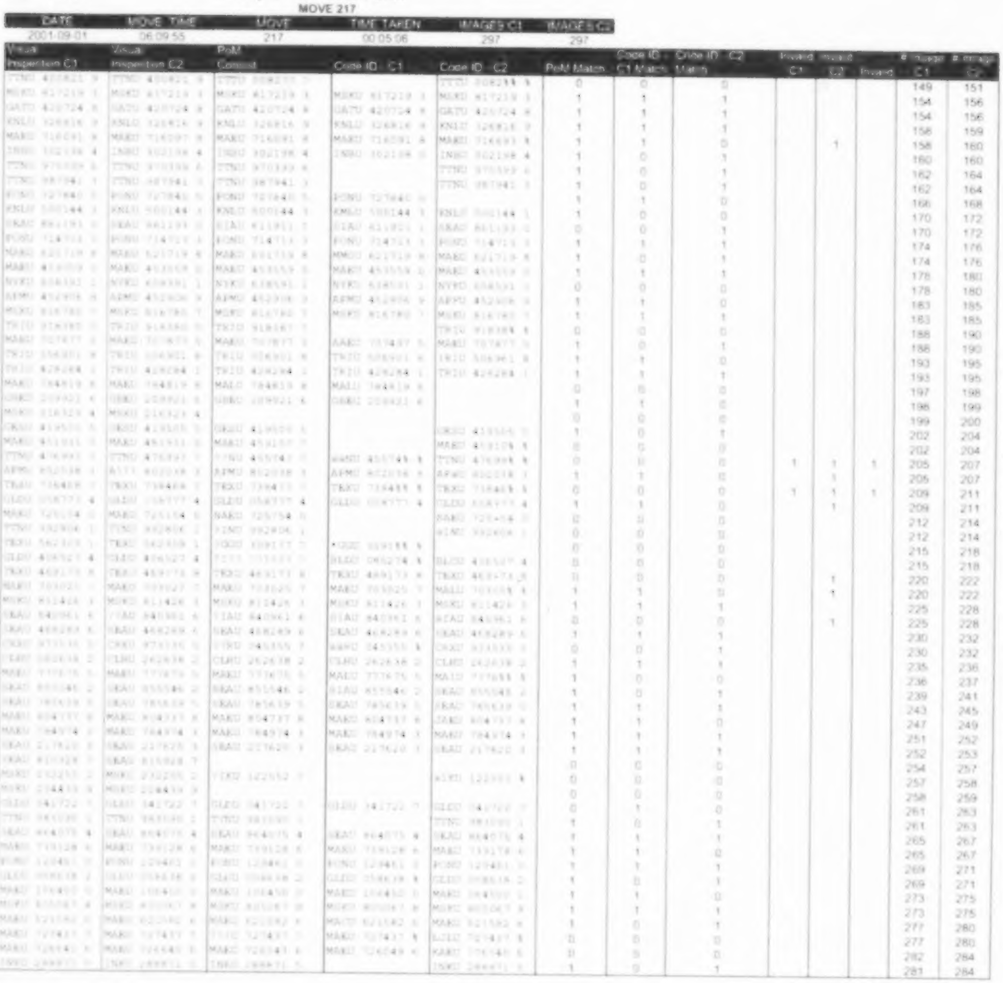
DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-01	06:09:55	217	00:05:06	297	297

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]				0	0	0				8	9
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			8	11
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				9	11
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				14	16
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				19	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				19	22
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				21	22
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				25	27
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1	1	1	25	27
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				30	33
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				30	33
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				36	38
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				36	38
[illegible]	[illegible]				0	0	0				41	42
[illegible]	[illegible]				0	0	0				41	44
[illegible]	[illegible]				0	0	0				43	44
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				47	49
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				47	49
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				52	54
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				52	54
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				57	59
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				57	59
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				60	63
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				60	63
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				64	66
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				64	66
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				68	70
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				68	70
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				71	74
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				71	74
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				76	79
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				76	79
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				81	84
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				81	84
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	1				87	89
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				87	89
[illegible]	[illegible]	[illegible]	[illegible]		1	0	0				92	93
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				92	94
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				93	94
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				97	98
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				97	100
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				99	100
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				102	103
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				102	105
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				104	105
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				108	110
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				108	110
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				113	115
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				118	120
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				118	120
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1			123	124
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				123	126
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				125	126
[illegible]	[illegible]				0	0	0	1	1	1	128	130
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				128	131
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			130	131
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				134	135
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				134	136
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				135	136
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				139	141
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				139	141
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				144	146
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				144	146
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0				149	151

DTI

Acceptance Tests Form

MOVE 217



DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-01	06:09:55	217	00:05:06	297	297

DTI

Acceptance Tests Form

MOVE 217

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-01	06:09:55	217	00:05:06	297	297

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
GEAU 480675 0	GEAU 480675 0	GEAU 480675 0	GEAU 480675 0	GEAU 480675 0	1	1	1				287	289
MAEU 731349 6	MAEU 731349 6	MAEU 731349 6	TAEU 731349 6	MAEU 731349 6	1	0	1				287	289
MSKU 820442 0	MSKU 820442 0	MSKU 820442 0	MSKU 820442 0	MSKU 820442 0	1	1	1				292	294
GEAU 461272 4	GEAU 461272 4	GEAU 461272 4	SIAU 461272 8	GEAU 461242 4	1	0	0				292	294

Nb. of containers : 130

Perfect match code : 46

Match Code ID : 94

Match Code ID C1 : 75

Match Code ID C2 : 65

Nb. Of Invalid C1 : 7

Nb. Of Invalid C2 : 10

Nb. Of Invalid : 4

	C1	C2	PoM
Accuracy	60.976%	54.167%	74.603%

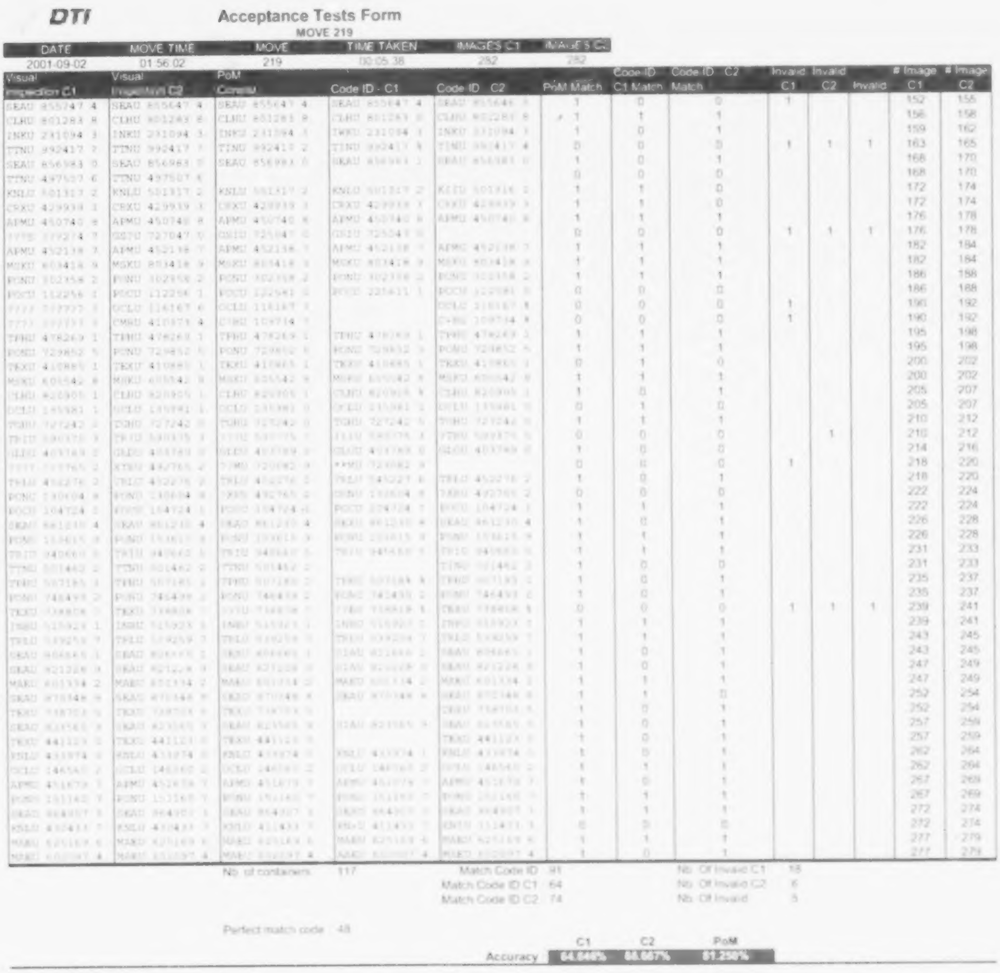
DTI

Acceptance Tests Form

MOVE 219

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-02	01:56:02	219	00:05:38	282	282

Visual Inspection C1	Visual Inspection C2	PoM Consel	Code ID C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
TRLU 299792 2	TRLU 299792 2	TRLU 299792 2	TRLU 299792 2	TRLU 299792 2	1	1	1				8	9
PONU 747893 3	PONU 747893 3	PONU 747893 3	PONU 747893 3	PONU 747893 3	1	1	1				8	10
TRIU 365777 4	TRIU 365777 4	TRIU 365777 4	TRIU 365777 4	TRIU 365777 4	1	1	1				9	10
TRLU 368131 1	TRLU 368131 1	TRLU 368131 1	TRLU 368131 1	TRLU 368131 1	1	1	1				13	14
GATU 809407 3	GATU 809407 3	GATU 809407 3	GAIU 809407 3	GATU 809407 3	1	0	1				13	15
CLHU 251771 4	CLHU 251771 4	CLHU 251771 4	CLHU 251771 4	CLHU 251771 4	1	1	1				14	15
CLHU 204429 4	CLHU 204429 4	CLHU 204429 4	CLHU 204429 4	CLFU 204429 4	1	1	0				18	19
SNIU 124849 1	SNIU 124849 1	SNIU 124849 1	SNIU 124849 1	SNIU 124849 1	1	1	1				19	20
POCU 042419 2	POCU 042419 2	POCU 042419 2	POCU 042419 2		1	1	0				22	23
OCLU 144323 9	OCLU 144323 9	OCLU 144323 9	OCLU 144323 9	OCLU 144323 9	1	1	1				22	25
SEAU 233747 9	SEAU 233747 9	SEAU 233747 9	SEAU 233748 %	SEAU 233747 9	1	0	1				24	25
SCMU 293110 4	SCMU 293110 4				0	0	0				27	28
OCLU 152673 4	OCLU 152673 4				0	0	0				27	29
SAMU 216055 4	SAMU 216055 4				0	0	0				29	29
GSTU ?71096 3	GSTU 281096 3				0	0	0	1			33	34
OCLU 144367 1	OCLU 144367 1	OCLU 144367 1	OCLU 144367 1	OCLU 144367 1	1	1	1				33	35
SEAU 217719 4	SEAU 217219 4	SEAU 217219 4	SEAU 217•19 4	SEAU 217219 4	1	0	1	1			34	35
TRIU 512266 3	TRIU 512266 3	TRIU 512266 3	TRIU 512266 3	TRIU 512266 3	1	1	1				37	40
PONU 127475 8	PONU 127475 8	PONU 127475 8	PONU 127475 6	PONU 177475 6	1	1	0				37	40
SEAU 802355 7	SEAU 802355 7	SEAU 802355 7	SIAU 842155 7	SEAU 802355 7	1	0	1				42	44
MSKU 619361 7	MSKU 619361 7	MSKU 619361 7	NSKU 619361 7	MSKU 619361 7	1	0	1				42	44
???U ??7277 7	GSTU 855278 0				0	0	0	1	1	1	47	49
PONU 142285 8	PONU 142280 8	PONU 142280 8	PONU 142280 8	PONU 142280 8	1	1	1				47	49
SEAU 218996 2	SEAU 218996 2	SEAU 218996 2	SEAU 218996 2		1	1	0				52	53
PONU 742452 0	PONU 742452 0	PONU 742452 0	PONU 742452 0	PONU 742452 0	1	1	1				52	54
???? ?????? 7	?ATU 223174 3				0	0	0	1	1	1	53	54
CLHU 257224 4	CLHU 257224 4	CLHU 257224 4	CLHU 257224 4	CLHU 257224 4	1	1	1				57	58
OCIU 418887 7	OCLU 418887 7	OCLU 418887 8	OCIU 418887 %	OCLU 418887 8	0	0	0	1			58	59
PONU 019015 5	PONU 019015 5	PONU 019015 5	PONU 019015 %	PONU 019016 6	1	0	0				60	61
MSKU 229213 9	MSKU 229213 9	MSKU 229213 9	MSKU 229213 9	MSKU 229213 9	1	1	1				61	63
PONU 068487 1	PONU 068487 1	PONU 068487 1	PONU 068487 1	PONU 068487 1	1	1	1				64	65
???U ??2??? 0	CAXU 602781 0	CAXU 607781 9		CAXU 607781 9	0	0	0	1			65	66
POCU 075521 0	POCU 065521 0	POCU 065521 0	POCU 065521 0	POCU 065521 0	1	0	1	1			67	68
MAEU 795417 9	MAEU 795417 9	MAEU 795417 9	MAEU 795417 9		1	1	0				68	69
PONU 081619 7	PONU 081619 7	PONU 081619 7	PONU 081619 7	PONU 081619-7	1	1	1				70	71
SEAU 230003 7	SEAU 230003 7	SEAU 230003 7	SEAU 230003 7	SEAU 230003 7	1	1	1				72	73
SAMU 215622 0	SAMU 215622 0	SAMU 215622 0	SAMU 215622 0	SAMU 215622 0	1	1	1				74	75
GATU 102972 8	GATU 102972 8	GATU 102972 8	GATU 102972 8	GATU 102972 8	1	1	1				76	77
SEAU 815035 6	SEAU 815035 6	SEAU 815035 6	SEAU 815035 6	RRAU 815035 6	1	1	0				78	80
POCU 114627 0	POCU 114627 0	POCU 114627 0	POCU 114627 0	POCU 114627 0	1	1	1				82	84
HDLU 400276 1	HDLU 400276 1	HDLU 400276 1	HDLU 400276 1	MOLU 400276 1	0	0	0	1			85	87
GATU 104069 2	GATU 104069 2	GATU 104069 2	GATU 104069 2	GATU 104069 2	1	1	1				89	90
GSTU 450477 2	GSTU 450477 2	GSTU 450477 2	GSTU 450477 2	GUTU 450477 2	1	1	1				90	91
SEAU 227705 0	SEAU 227705 0	SEAU 227705 0	SEAU 227705 0	SEAU 227705 0	1	1	1				93	94
MAEU 684797 8	MAEU 684797 8	MAEU 684797 8	MAEU 684797 8	MAEU 604797 0	1	1	0				94	95
TRLU 406696 0	TRLU 406696 0	TRLU 406696 0	TRLU 406696 0	TRLU 406696 0	1	1	1				96	99
CMBU ?71404 4	CMBU 231404 4	CIBU 314044 1	?IBU 314044 1	FMBU 231404 4	0	0	0	1			100	101
POCU 024321 3	POCU 024321 3	POCU 024321 3	POCU 024321 3	POCU 024321 0	1	1	0				101	102
TEXU 423940 9	TEXU 423940 9	TEXU 423940 9	TEXU 423940 9		1	1	0				103	105
TTNU 480712 8	TTNU 480712 8	TTNU 480712 7	TTNU 480712 %		0	0	0				107	109
MAEU 452195 6	MAEU 452195 6	MAEU 452195 6	MAEU 452195 6	MAEU 452195 6	1	1	1				111	114
MAEU 838298 8	MAEU 838298 8	MAEU 838298 8	??CU 838298 8	MAEU 838298 8	1	0	1				111	114
GSTU 775877 6	GSTU 985890 6	GSTU 985890 6		GSTU 985890 6	1	0	1	1			116	118
SEAU 836645 3	SEAU 836645 3	SIAU 836645 0	SLAU 816645 *	SEAU 836645 0	0	0	0				116	118
MSKU 812024 5	MSKU 812024 5	MSKU 812024 5	MSKU 812024 5	MSKU 812024 5	1	1	1				121	123
MAEU 801502 5	MAEU 801502 5	MAEU 801502 5	MAEU 801502 5	MORU 801502 9	1	1	0				121	123
KNLU 504580 0	KNLU 504580 0	KNLU 504580 0	KNLU 504580 0	KNLU 504580 0	1	1	1				126	128
SEAU 847712 2	SEAU 847712 2	SLAU 847712 ?		SLAU 847712 %	0	0	0				126	128
MAEU 818134 5	MAEU 818134 5	MAEU 818134 5	AAEU 818134 5	MAEU 818134 5	1	0	1				130	133
SEAU 462151 9	SEAU 462151 9	SEAU 462151 9	SEAU 462151 8	SEAU 462151 9	1	1	1				134	136
TRLU 538211 4	TRLU 538211 4	TRLU 538211 4	TRLU 538211 4	TRLU 538211 4	1	1	1				138	140
CLHU 812936 2	CLHU 812936 2	CLHU 812936 2	CLHU 812936 2	CLNU 812936 2	1	1	1				141	144
K??U 500743 6	KNLU 500743 6	KNLU 500743 6	?NLU 500743 6	KNLU 500743 6	1	0	1	1			145	147
MSKU 803113 2	MSKU 803113 2	MSKU 803113 2	MSKU 803113 2	MSKU 803113 2	1	1	1				149	151



DTI

Acceptance Tests Form

MOVE 219

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-02	01:56:02	219	00:05:38	282	282

Visual Inspection C1	Visual Inspection C2	PoM Consensus	Code ID - C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
SEAU 855747 4	SEAU 855647 4	SEAU 855647 4	SEAU 855647 4	SEAU 855646 3	1	0	0	1			152	155
CLHU 801283 8	CLHU 801283 8	CLHU 801283 8	CLHU 801283 8	CLHU 801283 8	1	1	1				156	158
INKU 231094 3	INKU 231094 3	INKU 231094 3	IWKU 231094 3	INKU 231094 3	1	0	1				159	162
TTNU 992417 7	TTNU 992417 7	TINU 992417 2	TINU 992417 4	TINU 992417 4	0	0	0	1	1	1	163	165
SEAU 856983 0	SEAU 856983 0	SEAU 856983 0	SEAU 856983 1	SEAU 856983 0	1	0	1				168	170
TTNU 497507 6	TTNU 497507 6				0	0	0				168	170
KNLU 501317 2	KNLU 501317 2	KNLU 501317 2	KNLU 501317 2	KTLU 501316 2	1	1	0				172	174
CRXU 429939 3	CRXU 429939 3	CRXU 429939 3	CRXU 429939 3	CRXU 428939 3	1	1	0				172	174
APMU 450740 8	APMU 450740 8	APMU 450740 8	APMU 450740 8	APMU 450740 8	1	1	1				176	178
[illegible]	GSTU 727047 0	GSIU 725047 0	GSIU 725047 0		0	0	0	1	1	1	176	178
APMU 452138 7	APMU 452138 7	APMU 452138 7	APMU 452138 7	APMU 452138 7	1	1	1				182	184
MSKU 803418 9	MSKU 803418 9	MSKU 803418 9	MSKU 803418 9	MSKU 803418 9	1	1	1				182	184
PONU 302358 2	PONU 302358 2	PONU 302358 2	PONU 302358 2	PONU 302358 2	1	1	1				186	188
POCU 112256 1	POCU 112256 1	POCU 122581 0	POCU 225411 1	POCU 122581 0	0	0	0				186	188
???? ?????? ?	OCLU 116167 6	OCLU 116167 7		OCLU 116167 8	0	0	0	1			190	192
???? ?????? ?	CMBU 410371 4	CIBU 109714 7		CIBU 109714 8	0	0	0	1			190	192
TPHU 478269 1	TTNU 478269 1	TPHU 478269 1	TPHU 478269 1	TPHU 478269 1	1	1	1				195	198
PONU 729852 5	PONU 729852 5	PONU 729852 5	PONU 729852 5	PONU 729852 5	1	1	1				195	198
TEXU 410885 1	TEXU 410885 1	TEXU 410885 1	TEXU 410885 1	TEXU 410865 1	0	1	0				200	202
MSKU 605542 8	MSKU 605542 8	MSKU 605542 8	MSKU 605542 8	MSKU 605542 8	1	1	1				200	202
CLHU 820905 1	CLHU 820905 1	CLHU 820905 1	CLHU 820918 9	CLHU 820905 1	1	0	1				205	207
OCLU 135981 1	OCLU 135981 1	OCLU 135981 0	OCLU 135981 0	OCLU 135981 5	0	1	0				205	207
TGHU 727242 3	TGHU 727242 3	TGHU 727242 3	TGHU 727242 3	TGHU 727242 3	1	1	1				210	212
TRIU 590375 3	TRIU 590375 3	TTIU 590775 7	ITIU 590375 3	PTRU 589375 5	0	0	0		1		210	212
GLDU 403769 2	GLDU 403769 2	GLDU 403769 2	GLAU 403769 0	GLDU 403769 0	1	0	0				214	216
???? ??9765 2	KTNU 447765 2	TTMU 720082 8	**MU 720082 8		0	0	0	1			218	220
TRLU 452276 2	TRLU 452276 2	TRLU 452276 2	TRLU 545227 6	TRLU 452276 2	1	0	1				218	220
PONU 130604 8	PONU 130604 8	TXRU 492765 2	CRNU 130604 8	TXRU 492765 2	0	0	0				222	224
POCU 104724 1	POCU 104724 1	POCU 104724 1	POCU 104724 1	POCU 104724 1	1	1	1				222	224
SEAU 861230 4	SEAU 861230 4	SEAU 861230 4	SEKU 861230 4	SEAU 861230 4	1	0	1				226	228
PONU 153615 8	PONU 153615 8	PONU 153615 8	PONU 153615 8	PONU 153615 8	1	1	1				226	228
TRIU 940660 5	TRIU 940660 5	TRIU 940660 5	TRIU 940660 5	TRIU 940660 5	1	1	1				231	233
TTNU 501462 2	TTNU 501462 2	TTNU 501462 2		TTNU 501462 3	1	0	0				231	233
TPHU 507185 3	TPHU 507185 3	TPHU 507185 3	TPHU 507184 9	TPHU 507185 3	1	0	1				235	237
PONU 746499 2	PONU 746499 2	PONU 746499 2	PONU 741435 2	PONU 746499 2	1	0	1				235	237
TEXU 738808 7	TEXU 738808 7	SYTU 738808 7	TTEU 738818 1	TEXU 738818 1	0	0	0	1	1	1	239	241
INBU 515923 1	INBU 515923 1	INBU 515923 1	INBU 515923 1	INBU 515923 1	1	1	1				239	241
TRLU 539259 7	TRLU 539259 7	TRLU 539259 7	TRLU 539259 7	TRLU 539259 7	1	1	1				243	245
SEAU 806665 1	SEAU 806665 1	SEAU 806665 1	SIAU 821666 1	SEAU 806665 1	1	0	1				243	245
SEAU 821228 9	SEAU 821228 9	SEAU 821228 9	SIAU 821228 9	SEAU 821228 9	1	0	1				247	249
MARU 601334 2	MARU 601334 2	MARU 601334 2	MARU 601334 2	MARU 601334 2	1	1	1				247	249
SEAU 870148 8	SEAU 870148 8	SEAU 870148 8	SEAU 870148 8	SEAU 870148 6	1	1	0				252	254
TEXU 738703 5	TEXU 738703 5	TEXU 738703 5		TEXU 738703 5	1	0	1				252	254
SEAU 823565 9	SEAU 823565 9	SEAU 823565 9	SIAU 823565 9	SEAU 823565 9	1	0	1				257	259
TEXU 441123 0	TEXU 441123 0	TEXU 441123 0		TEXU 441123 0	1	0	1				257	259
KNLU 433974 0	KNLU 433974 0	KNLU 433974 0	KNLU 433974 1	KNLU 433974 0	1	0	1				262	264
OCLU 146540 2	OCLU 146540 2	OCLU 146540 2	OCLU 146540 2	OCLU 146540 2	1	1	1				262	264
APMU 451679 7	APMU 451679 7	APMU 451679 7	APMU 451678 0	APMU 451679 7	1	0	1				267	269
PONU 151160 7	PONU 151160 7	PONU 151160 7	PONU 151160 7	PONU 151160 7	1	1	1				267	269
SEAU 864907 1	SEAU 864907 1	SEAU 864907 1	SEAU 864907 1	SEAU 864907 1	1	1	1				272	274
KNLU 430433 7	KNLU 430433 7	KNLU 411433 7	KNLU 411433 7	KNLU 111433 3	0	0	0				272	274
MARU 625169 6	MARU 625169 6	MARU 625169 6	MARU 625169 6	MARU 625169 6	1	1	1				277	279
MARU 650097 4	MARU 650097 4	MARU 650097 4	MARU 650097 4	MARU 650097 4	1	0	1				277	279

No. of containers	117	Match Code ID	91	Nb. Of Invalid C1	18
		Match Code ID C1	64	Nb. Of Invalid C2	6
		Match Code ID C2	74	Nb. Of Invalid	5

Perfect match code 48

	C1	C2	PoM
Accuracy	64.646%	66.667%	81.250%

DTI

Acceptance Tests Form

MOVE 220

DATE	Move time	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-02	04:07:49	220	00:03:26	109	109

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
OOLU 805711 7	OOLU 805711 7	OOLU 805711 7		OOLU 805711 7	1	0	1				14	11
HLCU 413608 0	HLCU 413098 0	HLCU 413608 0		HLCU 413608 0	0	0	0				29	27
HLXU 411137 0	HLXU 411137 0	HLXU 411137 0	HLXU 411137 0	HLXU 411137 0	1	1	1				29	27
HLCU 212768 6	HLCU 212768 6	HLCU 212768 4		HLCU 212768 6	1	0	1				33	32
HLCU 202249 5	HLCU 202249 5	HLCU 202249 3		HLCU 202249 3	0	0	0				34	33
HLXU 454673 2	HLXU 454673 2	HLXU 454673 2		HLXU 454673 2	1	0	1				34	32
HLXU 680175 2	HLXU 680175 2	HLXU 680175 2		HLXU 680170 2	1	0	1				39	36
HLCU 459219 4	HLCU 479219 4	HLCU 499219 4		HLCU 459219 4	0	0	0		1		39	36
HLXU 456962 0	HLXU 456962 0	HLXU 456962 0		HLXU 456962 0	1	0	1				44	41
HLXU 685223 5	HLXU 620223 5	HLXU 680223 8		HLXU 620223 5	1	0	1				49	46
???? 052889 9	JSSU 052889 9	JSSU 052889 9		JSSU 052889 9	1	0	1	1			52	51
PONU 097628 2	PONU 097628 2				0	0	0				53	52
POCU 104977 4	POCU 104977 4	POCU 104977 4		POCU 104977 4	1	0	0		1		57	54
TRLU 498888 2	TRLU 498888 2	TRLU 498888 2		TRLU 498888 2	1	0	1				61	58
PONU 133517 5	PONU 133517 5	PONU 133517 5	PONU 133517 8	PONU 133517 5	1	1	1				64	61
TRLU 296968 7	TRLU 296968 4	TRLU 296968 4		TRLU 296968 4	0	0	0	1			66	65
GLDU 212885 6	GLDU 212885 6	GLDU 212885 6	GADU 212885 6	GLDU 212885 6	1	0	1				68	67
HLXU 222635 2	HLXU 222630 2	HLXU 222630 2		HLXU 222630 2	1	0	1				75	74
HLXU 222735 6	HLXU 222735 6				0	0	0				77	76
HLXU 227040 8	HLXU 227040 8	HLXU 227040 8		HLXU 227040 8	1	0	1				80	79
HLCU 215918 3	HLCU 215918 3				0	0	0				82	80
MSKU 208362 7	MSKU 208362 7	MSKU 208362 7		MSKU 208362 7	1	0	1				85	84
MSKU 215539 0	MSKU 215539 0	MSKU 215539 0		MSKU 215539 0	1	0	1				87	85
???? ?????? ?	GSTU 468565 0	GSTU 468563 7		GSTU 468563 1	0	0	0	1			89	88
GLDU 837074 7	GLDU 837074 7	GLDU 837074 7		GLDU 837074 7	1	0	0				91	89
???U 445517 8	GSTU 445588 9				0	0	0	1			93	92
WRCU 882124 7	WRCU 882124 7				0	0	0				94	93
TRIU 807170 6	TRIU 807111 6	TRIU 807111 6	TRIU 807111 6		1	0	0	1			94	92
POCU 048895 3	POCU 048895 3	POCU 044895 1		POCU 048895 1	1	0	1				97	96
APMU 776387 4	APMU 776388 4	APMU 776382 4	APMU 776380 4		0	0	0	1			98	97
INBU 332778 7	INBU 332778 7	INBU 332778 4		INBU 332778 4	0	0	0	1	1	1	101	99
GESU 216170 8	GESU 216170 8	GESU 216171 8		GESU 216171 8	0	0	0				102	101
SCMU 208404 3	SCMU 208404 3	SCMU 208404 1		SCMU 208404 1	1	0	1				106	104
???? 217130 0	GSTU 215430 6				0	0	0	1			107	106
TEXU 716287 2	TEXU 716287 2	TEXU 716287 2	TEXU 716287 2	TEXU 716287 2	1	1	1				107	104

Nb. of containers 35

Match Code ID 21
Match Code ID C1 3
Match Code ID C2 18

Nb. Of Invalid C1 8
Nb. Of Invalid C2 3
Nb. Of Invalid 1

Perfect match code 3

	C1	C2	PoM
Accuracy	11.111%	56.250%	61.765%

DTI

Acceptance Tests Form

MOVE 221

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C2	IMAGES C1
2001-09-02	04:42:38	221	00:06:04	294	303

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				8	9
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	13	15
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1	1	1	13	15
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				18	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				18	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				23	25
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				27	29
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1	1	1	32	34
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1	1	1	32	34
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				37	37
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	37	39
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				38	39
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				41	42
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				41	44
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				43	44
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				46	48
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				46	48
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				49	50
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				51	52
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				51	56
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				53	56
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				57	58
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				57	60
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				59	60
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				62	65
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				62	65
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				67	69
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1	1			67	69
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				72	74
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				72	74
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				77	78
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				77	79
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				79	79
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	1	0				82	83
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				82	84
[illegible]	[illegible]				0	0	0				83	84
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				87	88
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				88	89
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				91	92
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				92	93
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				95	96
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1			97	97
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				100	101
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1	1			101	102
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				105	107
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				109	111
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				113	115
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			116	119
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				121	121
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				122	123
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	138	139
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				138	140
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				140	140
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1	1	1	144	144
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	144	146
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				145	146
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				149	150
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				150	151
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				153	155
[illegible]	[illegible]				0	0	0				158	158
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				160	162
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				168	170
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				173	174
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1	1	1	175	175

DTI

Acceptance Tests Form

MOVE 221

DATE	[illegible] TIME	MOVE	[illegible]	IMAGES C1	IMAGES C2
2001-09-02	04 42 38	221	00 06 04	294	303

Visual Inspection C1	Visual Inspection C2	POM Code	Code ID C1	Code ID C2	Perfect match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1	1			178	179
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				180	180
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				183	184
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				185	185
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				188	189
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	190	190
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				193	194
[illegible]	[illegible]				0	0	0	1			195	195
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				198	199
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				200	200
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				203	204
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				205	305
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				208	209
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1	1	1	210	210
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0				213	214
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				215	216
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				218	219
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				220	220
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0		1		223	224
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				225	225
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				228	229
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				230	231
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				233	234
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1	1			235	235
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				245	246
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1	1			246	247
	[illegible]	[illegible]		[illegible]	1	0	1	1				254
	[illegible]	[illegible]		[illegible]	1	0	1	1				256
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				249	260
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				249	261
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				251	261
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				254	264
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				254	266
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				255	266
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1	1	1	259	269
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				259	271
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				260	271
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				264	274
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				264	276
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				265	276
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				269	279
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				269	280
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				270	280
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1			274	284
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				274	285
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				275	285
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				279	289
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				279	290
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				280	290
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				284	295
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			284	295
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				289	299
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				289	301
[illegible]	[illegible]				0	0	0	1			291	301

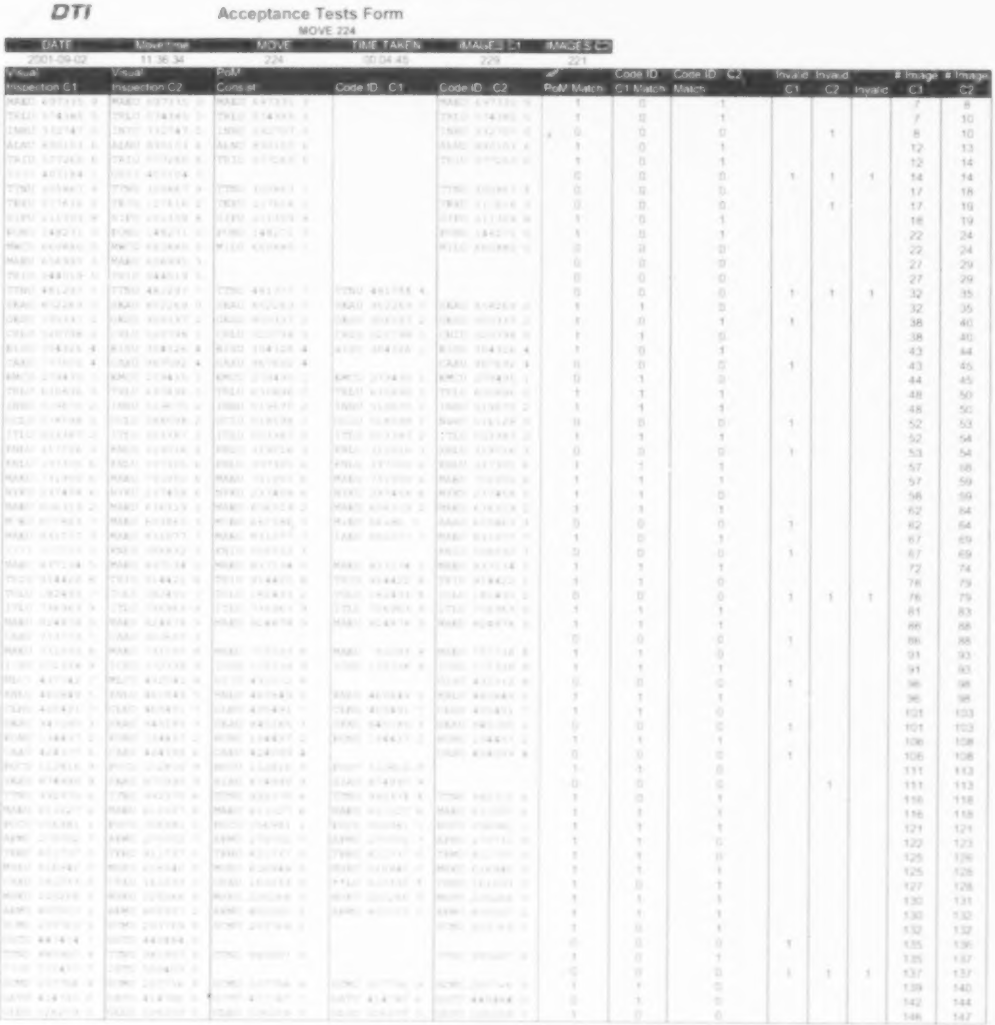
Nb. of containers 118

Match Code ID 98
Match Code ID C1 69
Match Code ID C2 68

Nb. Of invalid C1 25
Nb. Of invalid C2 13
Nb. Of invalid 12

Perfect match code 48

	C1	C2	PoM
Accuracy	74.194%	64.762%	84.906%



DTI

Acceptance Tests Form

MOVE 224

DATE	Move time	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-02	11:36:34	224	00:04:45	229	221

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				7	8
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				7	10
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0		1		8	10
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				12	13
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				12	14
[illegible]	[illegible]				0	0	0	1	1	1	14	14
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0				17	18
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0		1		17	19
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				18	19
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				22	24
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0				22	24
[illegible]	[illegible]				0	0	0				27	29
[illegible]	[illegible]				0	0	0				27	29
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	32	35
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				32	35
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1	1			38	40
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				38	40
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				43	44
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1			43	45
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	1	0				44	45
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				48	50
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				48	50
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			52	53
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				52	54
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			53	54
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				57	58
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				57	59
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				58	59
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				62	64
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			62	64
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				67	69
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1			67	69
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				72	74
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				76	79
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1	1	1	76	79
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				81	83
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				86	88
[illegible]	[illegible]				0	0	0	1			86	88
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				91	93
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				91	93
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1			96	98
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				96	98
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				101	103
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			101	103
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				106	108
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1			106	108
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				111	113
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0		1		111	113
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				116	118
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				116	118
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				121	121
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				122	123
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				125	126
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				125	126
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				127	128
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				130	131
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				130	132
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				132	132
[illegible]	[illegible]				0	0	0	1			135	136
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				135	137
[illegible]	[illegible]				0	0	0	1	1	1	137	137
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				139	140
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	1	0				142	144
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				146	147

DTI

Acceptance Tests Form

MOVE 224

DATE	Move time	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-02	11:36:34	224	00:04:45	229	221

Visual Inspection C1	Visual Inspection C2	PoM Correct	Code ID - C1	Code ID - C2	PoM Match	Code ID C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
SEAU 746736 1	SEAU 846736 1	SEAU 846736 1	SEAU 946736 1	SEAU 846736 1	1	0	1	1			146	148
PONU 068092 1	PONU 074092 1	PONU 068092 1	PO+U 068092 1	PONU 068092 1	0	0	0		1		148	148
CMOU 277778 7	CNRU 737687 7	GRKU 597567 7		GRKU 59+569 k	0	0	0	1	1	1	152	152
OCLU 145181 1	OCLU 145181 1	OCLU 777771 1	OCLU 451511 1	OCLU 145181 1	0	0	0				152	154
GATU 105392 8	GATU 106792 9	GATU 100392 9	GATU 100392 9	GATU 100928 k	0	0	0		1		153	154
TRIU 497494 2		TRIU 497494 2	TRIU 497494 2		1	1	0		1		157	
TTNU 969541 4					0	0	0		1		157	
GATU 434403 0		GATU 434403 0	GATU 434403 0		1	1	0		1		162	
KNLU 500134 0		KNLU 500134 0	KNLU 500134 0		1	1	0		1		162	
CRXU 874550 1	CRXU 874550 1	CRXU 874550 1	TRXU 874550 1	CRXU 874550 1	1	0	1				167	161
CLHU 801789 2	CLHU 801789 2	CLHU 801789 2	CLHU 801789 2	CLHU 801789 2	1	1	1				167	161
SEAU 852251 5	SEAU 852251 5	SEAU 852251 5	SEAU 852251 5	SEAU 852251 5	1	1	0				171	166
TRIU 998069 7	TRIU 998069 7	TRIU 998069 7	TRIU 998069 7	TRIU 998069 7	1	1	1				171	166
INBU 514746 2	INBU 514746 2	INBU 514746 2	INBU 514746 2	INBU 514746 2	1	1	1				176	171
INBU 515556 0	INBU 515556 0	INBU 515557 0	INBU 515508 0	INBU 515556 0	0	0	0				176	171
SEAU 847375 0	SEAU 847375 0	SEAU 847375 0		SEAU 847375 0	1	0	1				181	175
MAEU 706436 6	MAEU 706477 6	MAEU 706436 6	MAEU 706436 6		1	1	0		1		183	178
INBU 506907 7	INBU 506907 7	INBU 506907 7	INBU 506907 7	INBU 506907 7	1	1	1				186	182
SEAU 846183 0	SEAU 846183 0	SEAU 846183 0	SEAU 846183 0	SEAU 846183 0	1	0	1				188	182
CAXU 466888 9	CAXU 468788 9	TCAU 467888 9		*CAU 46+888 8	0	0	0		1		192	186
TTNU 401059 8	TTNU 401059 8	TTNU 401059 8	TIMU 401559 8	TTNU 401058 8	1	0	1				192	186
MAEU 611441 4	MAEU 611441 4	MAEU 611441 4	MAEU 611441 4	MAEU 611441 4	1	1	1				196	190
MAEU 737011 2	MAEU 737011 2	MAEU 737011 2	MAEU 737011 2	MAEU 737071 2	1	0	0				196	190
SEAU 840854 1	SEAU 840854 1	SEAU 840854 1	SEAU 84+854 1	SEAU 840854 1	1	0	1				200	194
MAEU 701475 9	MAEU 703470 9	MAEU 703470 9	MAEU 601470 9	IAEU 701470 9	1	0	0				200	194
SEAU 859226 0	SEAU 889226 0	SEAU 859226 0	SEAU 8+9226 0	SEAU 859226 0	1	0	1				204	198
GSTU 862306 0	GSTU 862306 0	[illegible]	GSTU 862308 6	GSTU 623065 1	0	0	0				204	198
CMBU 489265 0	CMBU 489245 0	CTOU 404216	C+OU 404216 1		0	0	0				209	203
MSKU 480501 0	MSKU 480501 0	MSKU 480501 0	MSKU 480501 0	MSKU 480501 0	1	1	1				213	207
GSTU 577307 5	GCCU 326928 5				0	0	0	1			213	207
TPHU 521200 8	TPHU 521200 8	TPHU 521200 8	TPHU 521200 8	TPHU 521200 8	1	1	1				217	211
MAEU 714519 5	MAEU 714519 5	MAEU 714519 5	MAEU 714519 5	MAEU 714585 5	1	1	0				220	215
PONU 711174 2	PONU 711174 2	PONU 711174 2	PONU 711174 2	PONU 711174 2	1	1	1				220	215
POCU 022896 1	POCU 022896 1	POCU 022896 1	POCU 022896 1		1	1	0				224	217
GLDU 202887 8	GLDU 202887 8	GLDU 202887 8	GLDU 202887 8	GLDU 202187 1	1	1	0				226	219

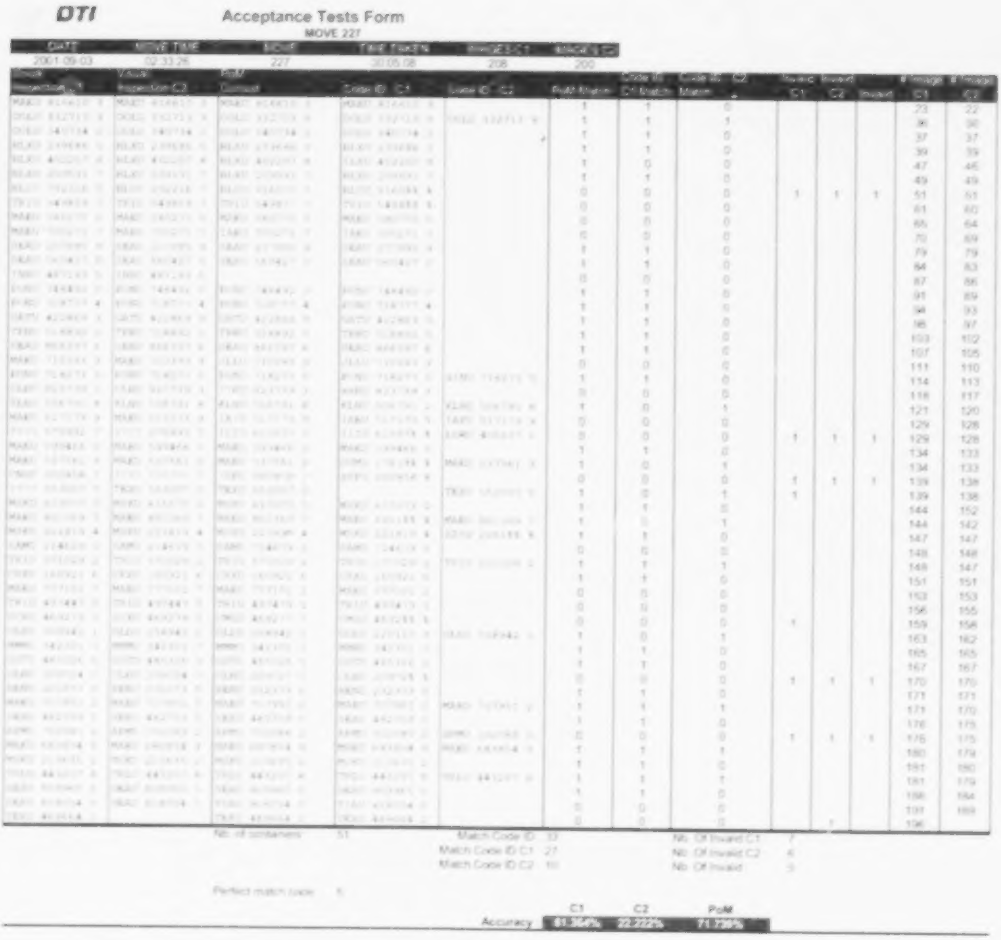
Nb. of containers 99

Match Code ID 66
Match Code ID C1 45
Match Code ID C2 45

Nb. Of Invalid C1 18
Nb. Of Invalid C2 16
Nb. Of Invalid 5

Perfect match code 24

	C1	C2	PoM
Accuracy	55.556%	54.217%	78.213%



DTI

Acceptance Tests Form

MOVE 227

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-03	02:33:26	227	00:05:08	208	200

Nb. of containers 51

Match Code ID 33
Match Code ID C1 27
Match Code ID C2 10

Nb. Of Invalid C1 7
Nb. Of Invalid C2 4
Nb. Of Invalid 5

Perfect match code 6

	C1	C2	PoM
Accuracy	61.364%	22.222%	71.739%

DTI

Acceptance Tests Form

MOVE 228

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-03	03:06:08	228	00:04:44	212	211

Visual Inspection C1	Visual Inspection C2	Prob' Consol	Code ID - C1	Code ID - C2	Prob' Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# image C1	# image C2
TRIU 594541 9	TRIU 594541 9	TRIU 594541 9	TRIU 594541 9	TRIU 594541 9	1	1	1				9	11
TGHU 401164 9	TGHU 401164 9	TGHU 401164 9		TGHU 401164 9	0	0	0				9	11
BMOU 480574 6	BMOU 480574 6	BMOU 480574 6	BMOU 480574 6	BMOU 480574 6	1	1	1				13	15
INBU 506362 8	INBU 506362 8	INBU 506362 8	INBU 506362 8	INBU 506362 8	1	0	1				13	15
MAEU 739089 1	MAEU 739089 1	MAEU 739089 1	MAEU 739089 1	MAEU 739089 1	1	1	1				17	19
INBU 511356 5	INBU 511356 5	INBU 511356 5		INBU 511356 5	0	0	0				17	19
MAEU 618805 8	MAEU 618805 8	MAEU 618805 8	MAEU 618806 8	MAEU 618805 8	1	1	1				22	24
CLHU 401930 4	CLHU 401930 8	CLHU 401930 4	CLHU 401930 4	CLHU 401930 4	1	1	1				22	24
MAEU 711187 1	MAEU 711187 1				0	0	0				27	29
GATU 404979 0	GATU 404979 0				0	0	0		1		27	29
CAXU 409749 2	CAXU 409869 2	CAXU 409869 2	CAXU 409869 2	CAXU 409869 2	1	0	1	1			32	34
MAEU 713748 2	MAEU 713748 2	MAEU 713748 2	MAEU 713748 2	MAEU 713743 2	1	0	0				32	34
MAEU 730968 4	MAEU 730968 4	MAEU 730968 4	IAEU 730968 4	VAEU 730368 4	1	0	0				37	39
[illegible]	CMBU 406719 6	CMBU 406719 6	IFBU 761515 5	CMBU 406719 6	1	0	1	1			37	39
SCMU 403572 6	SCMU 403572 6	SCMU 403572 6	SCMU 403572 8	SCMU 403572 6	1	0	1				41	43
[illegible]	SAMU 401526 2	SAMU 401576 2	[illegible]	SAMU 401576 2	0	0	0	1			41	43
MAEU 732216 2	MAEU 732216 2	MAEU 732277 7	MAEU 232216 2	MAEU 732281 5	0	0	0				45	47
[illegible]	CMBU 478401 7	FAIU 177151 9	[illegible]	CMBU 169808 5	0	0	0	1	1	1	45	47
TRIU 512440 8	TRIU 512440 8	TRIU 512440 8	TRIU 512440 8	TRIU 512440 9	1	1	0				49	51
SEAU 780765 7	GIAU 780765 7	CIAU 781765 7	GIAU 781765 7	LLAU 780765 7	0	0	0		1		49	51
MOKU 602894 7	MOKU 602894 7	MOKU 602894 7	MOKU 602894 7	MOKU 602894 7	1	1	1				53	55
MAEU 730447 6	[illegible]	MAEU 730446 7	MAEU 730466 5		0	0	0	1	1	1	53	55
TRLU 401194 7	TRLU 401194 7	TRLU 401194 7		TRLU 40-194 7	0	0	0				58	60
SEAU 815987 8	SEAU 815987 6	SEAU 815987 8	GIAU 81-987 8	SEAU 815987 8	1	0	1	1			63	65
MAEU 607970 9	MAEU 607970 9	MAEU 607970 9	MAEU 607970 9	MAEU 607970 9	1	1	1				63	65
MAEU 710983 7	MAEU 710989 7	MAEU 710989 7	MAEU 710983 7	IAEU 710989 7	1	1	0				68	70
MAEU 601259 9	MAEU 601259 9	TTIU 601259 9	AAEU 601259 9	AAUU 601259 9	0	0	0				72	74
TTNU 462251 0	TTNU 462251 0	TTNU 462251 0		TTNU 462251 0	1	0	1				72	74
CLHU 415643 6	CLHU 415643 8	CLHU 415641 6	CLHU 415643 6	CLHU 415643 6	1	1	0				76	78
ICOU 170962 6	ICOU 170962 6	ICOU 170962 6	ICOU 170962 6	ICOU 170962 6	1	1	1				76	78
MAEU 732185 9	MAEU 732185 9	MAEU 732185 9	MAEU 732185 9		1	1	0				80	82
MAEU 721235 4	MAEU 721235 4	MAEU 721235 4	MAEU 721235 4		1	1	0				80	82
SEAU 428396 2	SEAU 428396 2	SEAU 428396 2	SEAU 428396 2	SEAU 428396 2	1	1	1				84	86
TTNU 440719 0	TTNU 440719 0	TTNU 440719 0	TTNU 440719 0	TIBU 440714 5	1	1	0				84	86
CLHU 406847 0	CLHU 406847 0	CLHU 406847 0	CLHU 406847 0	CLHU 406842 0	1	1	1				88	90
MAEU 726437 9	MAEU 724437 8	MAEU 726437 8	MAEU 726437 8	MAEU 726437 8	1	1	0				88	90
KNLU 327523 4	KNLU 327523 4	KNLU 327523 4	KNLU 327523 4	KNLU 327523 7	1	0	0				92	93
POCU 407471 7	POCU 400471 0	POCU 400471 0	POCU 400888 5	POCU 400471 0	1	0	1	1			94	94
KNLU 329429 7	KNLU 329439 0	KNLU 329429 7	KNLU 329429 7		1	1	0				97	98
INBU 481447 7	INBU 481447 7				0	0	0	1	1	1	97	99
TRXU 222894 8	TRXU 222894 8	TRXU 222894 8	TRXU 222894 8		0	0	0				99	99
GATU 106507 1	GATU 106507 1				0	0	0				102	103
[illegible]	CAXU 285410 8	CAXU 285410 1		CAXU 285410 1	0	0	0	1			103	104
TTNU 467697 0	TTNU 467697 0	TTNU 467697 0		TTNU 467697 0	0	0	0				102	104
SAMU 214451 2	SAMU 214451 2	SAMU 214451 2	SAMU 714451 2	SAMU 214451 2	1	0	1				107	108
TTNU 983567 1	TTNU 983567 1	TTNU 983567 1		TTNU 983567 1	1	0	1				107	109
PONU 589649 0	PONU 589649 0	PONU 589649 0	PONU 589649 0	PONU 589649 0	1	1	1				109	109
PONU 066103 0	PONU 066103 0	PONU 066103 0	PONU 066555 5	PONU 066103 1	1	0	0				111	112
PONU 716488 7	PONU 716488 7	PONU 716488 7	PONU 716488 7	PONU 716488 7	1	1	1				115	117
PONU 353396 0	PONU 353396 0	PONU 353396 0	PONU 353396 0	PONU 353396 0	1	1	1				118	121
TRIU 456565 1	TRIU 456565 1	TRIU 456565 1	TRIU 456565 1	TRIU 456565 1	1	1	1				122	124
PONU 301982 8	PONU 301982 8	PONU 301982 8	PONU 301982 8	PONU 301982 8	1	1	1				126	128
TRIU 417899 0	TRIU 417899 0	[illegible]	TRIU 417399 0	*TIU 417899 8	0	0	0	1	1	1	130	132
MAEU 611295 7	MAEU 611295 7	MAEU 611295 7	MAEU 611295 7	TTNU 426155 5	1	1	0				135	136
MAEU 618867 1	MAEU 618867 1	MAEU 618867 1	MAEU 618867 1	MAEU 618867 1	1	1	1				139	141
TRLU 297850 0	TRLU 297850 0	TRLU 297850 0	TRLU 297850 0	TRLU 297850 0	1	1	1				144	145
MSKU 807749 4	MSKU 807749 4	MSKU 807749 4	MSKU 807745 4	MAEU 807749 4	1	1	1				149	151
SCMU 402638 6	SCMU 402638 6	SCMU 402638 6	SCMU 402638 6	SCMU 402638 6	1	0	1				149	151
TTNU 977741 2	TTNU 977741 2	DINU 977741 2	AMCU 222727 2	DINU 977741 2	0	0	0				154	155
NEAU 700013 3	NEAU 700013 3	LEAU 700013 3	LEAU 700013 3		0	0	0	1			158	158
MAEU 435576 1	MAEU 435576 1	MAEU 435576 1		MAEU 435576 1	1	0	1				159	160
TOLU 255364 8	TOLU 255364 8	TOLU 255364 8	TOLU 255364 8	TOLU 255364 8	1	1	1				162	164
TRIU 597939 2	TRIU 597939 2	TRIU 597939 2		TRIU 597939 2	1	0	1				167	169
GATU 404344 9	GATU 404344 9	GATU 404344 9	GATU 404344 9	GATU 404344 2	1	1	0				172	174

DTI

Acceptance Tests Form

MOVE 228

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-03	03:06:08	228	00:04:44	212	211

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				172	174
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				175	177
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				175	177
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1	1			179	181
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				179	181
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1	1			182	184
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			182	184
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				186	188
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				186	188
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				190	192
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				190	192
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				194	197
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1			194	197
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				199	201
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				199	201
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0				203	205
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1			203	205
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				207	209
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0				207	209

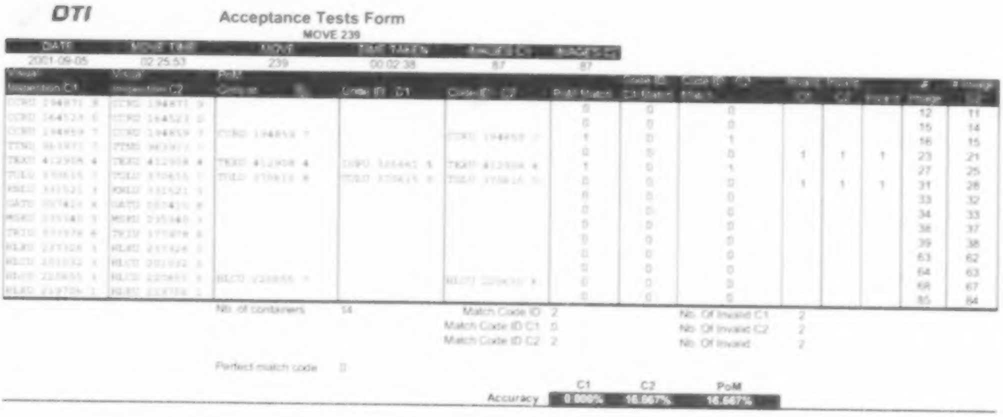
Nb. of containers 83

Match Code ID 60
Match Code ID C1 37
Match Code ID C2 42

Nb. Of Invalid C1 16
Nb. Of Invalid C2 6
Nb. Of Invalid 4

Perfect match code 25

	C1	C2	PoM
Accuracy	55.224%	54.545%	75.949%



DTI

Acceptance Tests Form

MOVE 239

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-05	02:25:53	239	00:02:38	87	87

Visual Inspection C1	Visual Inspection C2	PoM Output	Code ID C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image	# Image C2
CCRU 194871 3	CCRU 194871 3				0	0	0				12	11
CCRU 164523 6	CCRU 164523 0				0	0	0				15	14
CCRU 194859 7	CCRU 194859 7	CCRU 194859 7		CCRU 194859 7	1	0	1				16	15
TTNU 863971 7	TTNU 863971 7				0	0	0	1	1	1	23	21
TRXU 412908 4	TRXU 412908 4	TRXU 412908 4	[illegible]	TRXU 412908 4	1	0	1				27	25
TOLU 370615 7	TOLU 370615 7	TOLU 370615 8	TOLU 370615 8	[illegible]	0	0	0	1	1	1	31	28
RMLU 331521 3	RMLU 331521 3				0	0	0				33	32
GATU 557415 8	GATU 557415 8				0	0	0				34	33
MSKU 235340 3	MSKU 235340 3				0	0	0				38	37
TRIU 377978 6	TRIU 377978 6				0	0	0				39	38
HLXU 237326 3	HLXU 237326 3				0	0	0				63	62
HLCU 201032 3	HLCU 201032 3				0	0	0				64	63
HLCU 220855 3	HLCU 220855 3	HLCU 220855 3		HLCU 220855 3	0	0	0				68	67
HLXU 219756 1	HLXU 219756 1				0	0	0				85	84

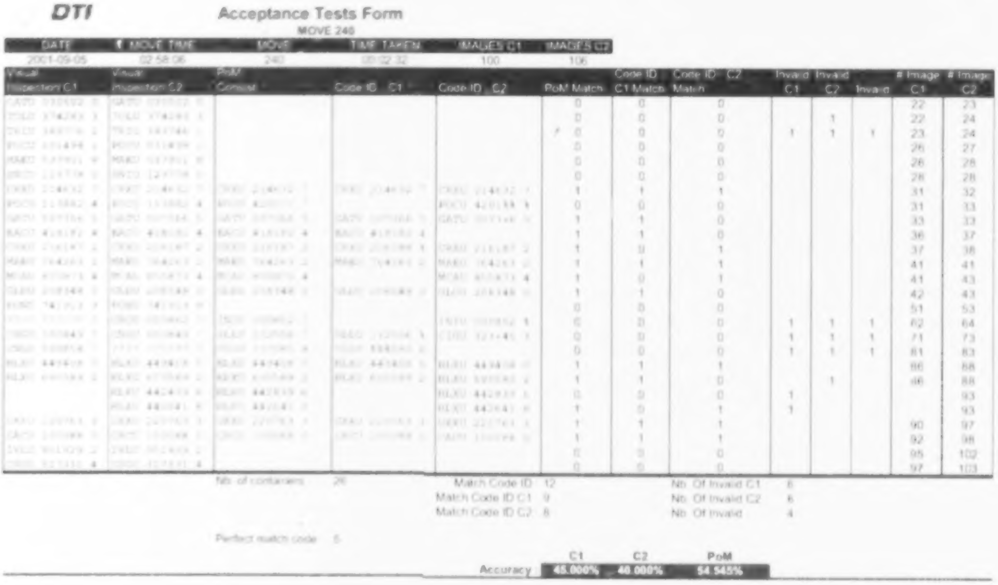
Nb. of containers 14

Match Code ID 2
Match Code ID C1 0
Match Code ID C2 2

No. Of Invalid C1 2
No. Of Invalid C2 2
No. Of Invalid 2

Perfect match code 0

	C1	C2	PoM
Accuracy	0.000%	16.667%	16.667%



DTI

Acceptance Tests Form

MOVE 240

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-05	02:58:06	240	00:02:32	100	106

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID C1	Code ID C2	PoM Match	Code ID C1 Match	Code ID C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
[illegible]	[illegible]				0	0	0				22	23
[illegible]	[illegible]				0	0	0		1		22	24
[illegible]	[illegible]				0	0	0	1	1	1	23	24
[illegible]	[illegible]				0	0	0				26	27
[illegible]	[illegible]				0	0	0				28	28
[illegible]	[illegible]				0	0	0				28	28
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				31	32
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0				31	33
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				33	33
[illegible]	[illegible]	[illegible]	[illegible]		1	1	0				36	37
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	0	1				37	38
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				41	41
[illegible]	[illegible]	[illegible]		[illegible]	1	0	1				41	43
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0				42	43
[illegible]	[illegible]				0	0	0				51	53
[illegible]	[illegible]	[illegible]		[illegible]	0	0	0	1	1	1	62	64
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0	0	1	1	1	71	73
[illegible]	[illegible]	[illegible]	[illegible]		0	0	0	1	1	1	81	83
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				86	88
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0		1		86	88
	[illegible]	[illegible]		[illegible]	0	0	0	1				93
	[illegible]	[illegible]		[illegible]	1	0	1	1				93
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				90	97
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1				92	98
[illegible]	[illegible]				0	0	0				95	102
[illegible]	[illegible]				0	0	0				97	103

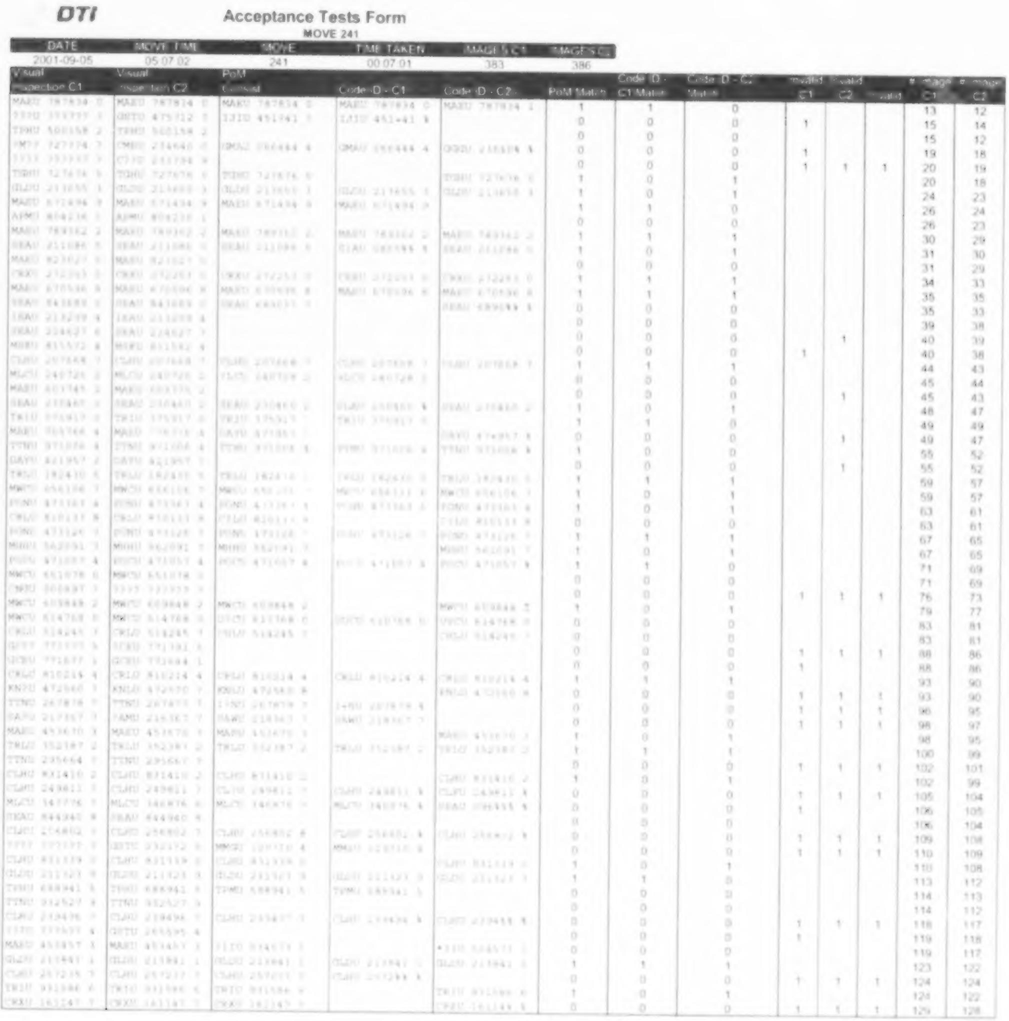
Nb. of containers 26

Match Code ID 12
Match Code ID C1 9
Match Code ID C2 8

Nb. Of Invalid C1 6
Nb. Of Invalid C2 6
Nb. Of Invalid 4

Perfect match code 6

	C1	C2	PoM
Accuracy	45.000%	40.000%	54.545%



DTI

Acceptance Tests Form

MOVE 241

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-05	05 07 02	241	00 07 01	383	386

DTI

Acceptance Tests Form

MOVE 241

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-05	05 07 02	241	00 07 01	383	386

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
TRHU 821856 7	???? 823406 7	TRHU 821856 2	TRHU 823806 2	MAEU 332049 8	0	0	0		1		130	129
MAEU 812925 8	MAEU 812925 8				0	0	0				130	128
APMU 282719 8	APMU 282719 8	APMU 282715 8	APMU 282789 9		1	1	0				134	133
APMU 284963 1	APMU 284963 1	APMU 284963 1	APMU 284963 1		1	1	0				135	134
TTNU 942414 2	TTNU 942414 2				0	0	0				135	133
GEAU 221541 9	GEAU 221541 7	GEAU 221541 9	GEAU 221541 9	GEAU 221541 8	1	1	0		1		138	138
GEAU 221818 8	GEAU 221858 6	GEAU 221818 8	GEAU 221818 8	GEAU 221818 8	1	0	1				140	139
GEAU 857188 8	GEAU 857188 8	GEAU 857188 8		GEAU 857188 8	1	0	1	1			140	138
MOKU 801730 0	MOKU 801730 0	MOKU 801730 0	MOKU 801730 0	MOKU 801730 0	1	1	1				143	141
MOKU 811228 1	MOKU 811228 1	MOKU 811728 1		MOKU 811728 1	0	0	0				143	141
CLHU 818179 3	CLHU 818179 3	CLHU 818177 9	CLHU 818177 7	CLHU 818178 8	0	0	0	1	1	1	147	145
MAEU 820721 9	MAEU 820721 9	MAEU 820721 9		MAEU 820721 9	0	0	0				147	145
TEXU 511754 6	TEXU 511754 6	TEXU 511754 6	TEXU 511754 6	TEXU 511754 6	1	1	1				150	148
MOKU 808177 2	MOKU 808187 2	JBPU 808137 2	JBPU 808111 2		0	0	0	1			150	148
CRTU 281781 8	CRTU 281781 8	KTRU 281781 8		KTRU 281781 8	0	0	0	1			153	152
SAYU 219808 2	SAMU 219818 2	TAVU 219840 3	SAMU 219840 4		0	0	0	1			154	153
TTNU 891827 1	TTNU 891827 1				0	0	0				154	152
TTNU 891181 0	TTNU 891181 0	TTNU 891181 0	TTNU 891181 0	TTNU 891181 0	1	1	1				158	156
MOKU 201438 3	MOKU 201438 3	MOKU 201438 3	MOKU 201438 3		1	1	0				159	158
MAEU 789513 5	MAEU 789513 5	JAEU 789513 5	JAEU 789513 5		0	0	0				161	160
MOKU 241598 8	MOKU 241598 8	MOKU 241598 8	MOKU 241598 7	MOKU 241598 0	1	1	1				164	163
MAEU 877862 4	MAEU 877862 4	MAEU 877862 4	MAEU 877862 4		1	1	0				165	164
GEAU 864111 1	GEAU 864111 1	GEAU 864111 1		GEAU 864113 1	1	0	1				165	163
SAMU 222707 8	SAMU 222707 8	SAMU 222707 8	SAMU 222707 8	SAMU 222707 0	1	0	0				169	168
MOKU 221883 0	MOKU 221883 0	MOKU 221883 0	MOKU 221883 0		1	1	0				170	169
GEAU 488004 4	GEAU 488004 4	GEAU 488004 4	GEAU 488004 4	GEAU 488004 4	1	1	1				170	168
???? 777527 7	GSTU 782556 1	UVKU 358157 0	UVKU 358155 5	GSTU 662056 7	0	0	0	1	1	1	174	173
SCMU 271187 7	SCMU 201118 8	SCMU 201118 1	SCMU 201118 5		0	0	0	1			175	175
TTNU 987691 8	TTNU 987691 8				0	0	0				175	173
TEXU 239454 0	TEXU 239454 0	TEXU 239454 0	TEXU 239454 0	TEXU 239444 5	1	1	0				179	178
YMLU 278774 8	YMLU 278774 8	YMLU 278774 8	YMLU 278774 8		1	1	0				180	179
APMU 801109 8	APMU 801179 8	APMU 801109 9	APMU 801109 8		1	1	0		1		184	181
TGSU 139010 0	TGSU 139010 0	TGSU 330101 1	TGSU 330101 1		0	0	0				187	185
GLDU 858819 2	GLDU 858819 2	GLDU 858819 2	GLDU 858819 2	GLDU 858819 8	1	1	0				191	189
GEAU 225240 5	GEAU 225240 5				0	0	0				193	192
MOKU 319480 6	MOKU 319480 5				0	0	0		1		194	194
TTNU 808105 2	TTNU 808105 2	TTNU 808105 2	TTNU 808103 2		1	1	0				199	197
CLHU 881782 9	CLHU 881782 9				0	0	0				199	197
MAEU 455910 1	MAEU 455910 1	MAEU 455910 2	MAEU 455910 1	MAEU 455910 1	1	1	0				204	202
GLDU 553838 7	GLDU 553838 7	GLDU 553838 3		GLDU 553838 7	1	0	0				204	202
APMU 455512 2	APMU 455542 2	APMU 455777 7		APMU 455555 5	0	0	0				209	207
???? 451907 8	MAEU 451907 5	MAEU 451307 8		MAEU 451909 5	1	0	1	1			209	207
MAEU 454664 0	MAEU 454664 0	MAEU 454664 0	MAEU 454662 0		1	1	0				215	212
MAEU 456209 8	MAEU 456209 8	LWTU 582295 7	LWTU 582283 5		0	0	0				223	220
GEAU 870278 0	GEAU 810278 0	GEAU 870278 0	GEAU 810278 0		1	1	0				228	225
APMU 458162 9	APMU 458162 9	APMU 458162 9	APMU 454162 9	APMD 154162 9	1	1	0				232	229
GEAU 486998 0	GEAU 486998 0	GEAU 486918 0	GEAU 486998 0	GEAU 486998 0	1	1	1				236	234
GEAU 482451 7	GEAU 482451 7	GEAU 482455 7	GEAU 482451 7	GEAU 482451 7	1	1	1				240	238
GEAU 487091 2	GEAU 487091 2	GEAU 487091 2	GEAU 487091 2	GEAU 487091 2	1	1	1				245	242
MAEU 450721 1	MAEU 450721 1	MAEU 450721 1	MAEU 450721 1	MAEU 450721 1	1	1	1				250	247
MAEU 455284 9	MAEU 455284 9	MAEU 455284 9	MAEU 455284 9	MAEU 455284 9	1	1	1				254	251
GEAU 480421 4	GEAU 480421 8	GEAU 480421 A	GEAU 480421 5	GEAU 480421 2	1	1	0				258	255
GEAU 876232 0	GEAU 876122 0				0	0	0				269	267
FBHU 785478 0	FBHU 485178 5				0	0	0	1			272	270
PONU 075580 0		PONU 755777 7	PONU 075580 0	PONU 055747 2	0	1	0		1		275	
???? 095330 3					0	0	0	1	1	1	276	
GEAU 871091 1		TAIU 710111 1	*AIU 110111 1		0	0	0		1		276	273
	FNLU 124890 1	FNLU 124890 8		FNLU 124890 1	1	0	1	1				274
PONU 054976 4	PONU 054976 4	PONU 054976 4	PONU 054976 4	PONU 054976 4	1	1	1				280	277
		FICU 040215 0		FICU 040133 8	0	0	0	1	1	1		279
	MOKU 222851 0	MOKU 222851 0		MOKU 222851 0	1	0	1	1				281
	MOKU 583089 5				L	0	0	1				282
TEXU 336806 2	TEXU 336805 2	TEXU 336806 2	TEXU 336806 2	TEXU 336806 2	1	0	1				284	285
TTNU 420514 0	TTNU 420514 0	TTNU 280140 3	TTNU 280140 5		0	0	0				284	285

OTI

Acceptance Tests Form

MOVE 241

DATE	MOVE TIME	MOVE	TIME TAKEN	IMAGES C1	IMAGES C2
2001-09-05	05 07 02	241	00 07 01	383	386

Visual Inspection C1	Visual Inspection C2	PoM Consist	Code ID - C1	Code ID - C2	PoM Match	Code ID - C1 Match	Code ID - C2 Match	Invalid C1	Invalid C2	Invalid	# Image C1	# Image C2
TRLU 511511 8	TRLU 511511 8	TRLU ?????? ?	TRLU $$$$$$ $	TRLU 511511 8	0	0	1				288	289
MAEU 707996 ?	MAEU 807976 6	???U 974181 9	***U 974181 9	MAEU 81766$ $	0	0	0	1	1	1	288	289
SEAU 221451 4	SEAU 221451 4	SEAU 221451 4	SIAU 221451 4	SEAU 221451 4	1	0	1				292	294
INBU 301205 1	INBU 301205 1	INBU 301205 1	IMBU 301205 1	INBU 301205 1	1	0	1				293	295
PONU 142710 0	PONU 142710 0	PONU 142710 0		PONU 142710 0	1	0	1				293	294
TGHU 731993 3	TGHU 731993 3	TGHU 731993 3	TGHU 731993 3	TGHU 731993 3	1	1	1				298	299
?A?U 836314 6	GATU 836114 6	GATU 836314 6	OHVU 836314 6	GATU 83631$ $	0	0	0	1			298	299
PONU 085908 0	PONU 085908 0	PONU 085908 0	WONU 085908 0	PONU 085908 0	1	0	1				302	304
SCMU 201313 7	SCMU 201313 7	SCMU 201313 7	SCMU 201313 7		1	1	0				303	306
C??? ?????? ?	CAXU 407128 8				0	0	0	1			303	304
HLXU 220819 8	HLXU 220819 8	HLXU 220819 8		HLXU 220819 8	1	0	1				307	309
HLCU 242998 4	HLCU 242998 4		HLCU 242998 4		0	1	0				308	311
HLXU 616193 5	HLXU 616193 5	HLXU 316131 5		HLAU 316131 5	0	0	0				308	309
HLXU 476892 0	HLXU 476892 0	HLXU 476892 0	HLXU 476892 0	HLXU 476892 0	1	1	1				313	314
HLCU 423778 5	HLCU 423778 5	HLCU 423778 5		HLCU 423778 5	1	0	1				313	314
???? 202262 2	HLCU 202262 2	HLCU 202262 2	LXZU 256212 $	HLCU 202262 2	1	0	1	1			317	319
HLXU 205560 0	HLXU 205560 0		HLXU 205560 6		0	0	0				318	320
HLXU 427726 9	HLXU 827726 9	HLXU 427726 9		ILXU 427726 9	1	0	0				318	319
TTNU 292306 8	TTNU 292306 8	TTNU 292306 8	TTNU 292306 8	TTNU 292306 $	1	1	0				322	324
SCMU 204217 7	SCMU 204217 7	SCMU 204217 7	SCMU 204217 Y		1	1	0				323	326
GATU 819765 7	GATU 819765 7	GATU 819765 7	GATU 819765 7	GATU 819765 7	1	1	1				323	324
POCU 032388 0	POCU 032388 0			POCU 032388 0	0	0	1				327	329
POCU 052302 4	POCU 052302 4	POCU 052302 4	POCU 052302 4		1	1	0				328	330
MAEU 701277 8	MA?? ??5277 8	MAEU 701277 8	MAEU 701277 8		1	1	0		1		328	329
GATU 075240 8	GATU 075240 8	GATU 075240 8	GATU 075240 8	GATU 075240 8	1	1	0				332	334
CLHU 228938 4	CLHU 228938 4	CLHU 228938 4	CLFU 228938 4	CLHU 228938 4	1	0	1				333	335
MAEU 615059 6	MAEU 615059 6				0	0	0				333	334
TTNU 360067 1	TTNU 360067 1	LEMU 360067 1	L*MU 360067 1		0	0	0				336	339
POCU 0?7067 ?	POCU 045051 9	POCU 046057 6	POCU 046057 6		0	0	0	1			338	340
TTNU 412443 5	TTNU 412443 5				0	0	0				338	339
CAXU 248773 1	CAXU 246883 ?	GAXU 246883 1		GAXU 246883 1	0	0	0	1	1	1	341	343
MSKU 238796 0	MSKU 238796 0	MSKU 238796 0	MSKU 238796 0	MSKU 238796 0	1	1	1				343	345
TRLU 023283 1	TRLU 023283 1	TRLU 023283 1	TRLU 023283 1	TRIU 023283 1	1	1	0				346	348
CCRU 194866 3	CCRU 194866 3	CCRU 194866 3	CCRU 194866 3		1	1	0				347	349
MAEU 775504 8	MAEU 775504 8	MAEU 775504 8	MAEU 775504 6		1	1	0				365	367
?CYU 417177 7	OCLU 417117 7				0	0	0	1	1	1	366	369
NYKU 234625 0	NYKU 234625 0				0	0	0				380	382
MSKU 208036 1	MSKU 208036 1				0	0	0				381	383

Nb. of containers 166

Match Code ID 85
Match Code ID C1 56
Match Code ID C2 53

Nb. Of invalid C1 40
Nb. Of invalid C2 31
Nb. Of invalid 20

Perfect match code 24

	C1	C2	PoM
Accuracy :	44.444%	39.259%	58.219%